Richmond County Public Schools
Technology Plan
Addendum
July 1, 2016 – June 30, 2018

Approved by the Richmond County School Board June 8th 2011
Revised April 16th 2014
Revised May 19th 2016
Revised August 10th 2016

http://www.richmond-county.k12.va.us

Table of Contents

Executive Summary/Statement 2

Goals and Objectives Summary 4

Vision 5

Mission 5

Designing and Sharing the Technology Plan 6

Distribution Process 6

Current Status 9

Review of Accomplishments from Previous Plan 103

Needs Assessment 14

Goals, Objectives, Strategies, and Evaluation Strategies 176

Appendix 1 Fiscal Analysis 24

Appendix 2 Acceptable Use Policy 265

Appendix 3 Richmond County Public Schools Internet Safety Program 9/18/2008 42

Appendix 4 Richmond County Proposed 2014 Technology Budget 72

Appendix 5 Richmond County Proposed 2016 Technology Budget 76

Executive Summary/Statement

Richmond County Public Schools continues to use technology to provide opportunities to its students and staff members that would otherwise not exist in our rural environment. Our small "out of the way" school system struggles to balance budgetary concerns and the availability of services with providing our students and staff with industry standard, enterprise level computing and information systems. The schools' data network has become a critical component in the day to day functioning of all aspects of the district's operation. From the VOIP phone system to taking attendance in class, critical tasks handled on the computer network are pervasive. Instructional tasks utilize interactive white boards, streaming digital media, digital projectors, and a variety of other tools. The amount of bandwidth utilized continues to climb, and the specifications of the software and hardware tools necessary to complete the desired instructional tasks expand exponentially.

It is expected that this technology plan will be a "living" document, and as such will be revisited at least annually for review and revision. The technology team will meet either face to face and/or electronically for this review. The

resulting revisions to the document will be added in the form of an appendix, or in line with the document, whichever is most appropriate.

Goals and Objectives Summary

Goal 1: Provide a safe, flexible, and effective learning environment for all students and staff.

Objective 1.1: Deliver appropriate and challenging curricula through face-to-face, blended, and virtual learning environments.

Objective 1.2: Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.

Objective 1.3: Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments.

Objective 1.4: All eligible E-Rate Services will be requested and applied for on an annual basis.

Goal 2: Engage students in meaningful curricular content through the purposeful and effective use of technology.

Objective 2.1: Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.

Objective 2.2: Actualize the ability of technology to individualize learning and provide equitable opportunities for all learners.

Objective 2.3: Facilitate the implementation of high-quality Internet safety programs in schools.

Objective 2.4: Provide necessary support to allow all instructional and support staff to use technology to perform basic job functions.

Goal 3: Afford students and staff with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understanding.

Objective 3.1: Provide and support professional development that increases the capacity of teachers to design and facilitate meaningful learning experiences, thereby encouraging students to create, problem solve, communicate, collaborate, and use real-world skills by applying technology purposefully.

Objective 3.2: Ensure that students, teachers, and administrators are ICT literate.

Objective 3.3: Implement technology-based formative assessments that produce further growth in content knowledge and skills development.

Goal 4: Provide students with access to authentic and appropriate tools to gain knowledge, develop skills, extend capabilities, and create and disseminate artifacts that demonstrate their understandings.

Objective 4.1: Provide resources and support to ensure that every student and staff member has access to a personal computing device.

Objective 4.2: Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use a variety of technology tools.

Objective 4.3: Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas.

Goal 5: Use technology to support a culture of data-driven decision making that relies upon data to evaluate and improve teaching and learning.

Objective 5.1: Use data to inform and adjust technical, pedagogical, and financial support.

Objective 5.2: Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.

Objective 5.3: Promote the use of technology to inform the design and implementation of next generation standardized assessments.

Vision

The Richmond County School System envisions an educational climate that provides equitable access for all students, teachers, and staff members to the physical resources and the technical literacy required to become effective and efficient creators and consumers of information and knowledge.

Mission

The mission of the Richmond County Public Schools is to collaborate with parents and the community to provide a healthy environment in which children can develop academically, socially, physically, and emotionally in order to become lifelong learners, independent thinkers, and responsible citizens. In order to achieve the targets set by Richmond County's mission statement, technology must be deployed into the teaching and learning process so that it is efficiently and effectively utilized to further the growth of the complete student learner, making him or her prepared to work and live as responsible citizens in the technological society of the 21st century.

Designing and Sharing the Technology Plan

The Technology Planning Committee members were chosen to provide input into the planning process from a variety of different viewpoints by involving parents, students, administrators, teachers, community leaders, consultants, and representatives of the local community college. The members of this committee are:

Christopher Trader	Director of Technology
Sarah M. Schmidt	Assistant Superintendent
Marian C. Thompson	Data Manager
Christopher Balderson	Network Manager
Heaven Ball	Instructional Technology Resource Teacher
Sandra Hedricks	Director of Special Education
Patricia Means	Director of Student Services
David Ferguson	Principal, Rappahannock High
Brooks Smith	Teacher, Richmond County Elementary
Jason Strong	Principal, Richmond County Elementary
Carolyn Reiner	Teacher, Rappahannock High
Thomas (Ed) Brown	Community Member
Christy Douglas	Teacher, Richmond County Elementary
Kelly Moss	Parent

A meeting of the entire team was scheduled June 14th 2010 to lay out the scope of the process. After the initial meeting, individual and small group meetings will occur with members based on specific areas of knowledge or interest. The use of technology in the form of Google Apps was implemented for the sharing of ideas and discussions. New committee members were added to the group as previous committee members have since moved on from Richmond County.

Distribution Process

The Director of Technology will present the Technology Plan document to the Richmond County School Board for its approval. Once approved, the following distribution activities will occur within 3 months:

- The Technology Plan will be posted on the district's web site
- A summary article will be written and presented to the local newspaper
- Copies will be distributed to all committee members
- Copies will be provided to all schools for discussion with staff members
- Copies will be provided to each school library to be available on request
- Technology staff will discuss portions of the Technology Plan at faculty meetings when requested and scheduled by building administrators

Previous Status

Richmond County Public Schools demonstrates excellence in technology in a variety of ways. The Technology Department at Richmond County Public Schools continues to be compliant with the Standards of Quality, employing one full time computer technician and one year round ITRT (Instructional Technology Resource Teacher). One of the technology staff has been made a full time Data Manager to

work with the ever increasing state reports. During the Mid-term review of the technology planning cycle, most of the goals have been achieved and additional planned improvements were realized and put into effect.

Richmond County seeks to make appropriate hardware available to teachers and learners; hence our instructional hardware is constantly updated, and new tools are frequently introduced. By joining the 4 Rivers Technology Consortium, Richmond County received Smart boards, airliner slates, digital projectors, graphing calculators, and other technology hardware used for instruction in the classroom, that otherwise may have been difficult to obtain. When the 4 Rivers Technology Consortium ceased, we were not able to replace the training and hardware our district has received as a member. Virtually every classroom in the county still has five computers but the individual color ink jet printers were removed, and printing was consolidated into network printers which were placed strategically throughout the schools.

The high school hosts a Business lab with 29 computers and an Office Technology lab with 29 computers, as well as a cart of 25 tablets for the Career in Technical Education classes (CTE). An electronic classroom at the high school with video conferencing capabilities and network drops provides an environment used for streaming online classes. A library lab was created at the high school during the summer of 2013 with 26 computers and an interactive white board. The library also houses 12 computers with additional network drops that can be used with laptop computers. A variety of technology materials are available for checkout from the high school library including: two mobile laptop carts with 24 laptops on each, a netbook cart with 25 devices; several multimedia carts that include digital projectors; a Smart board with projector; a Renaissance Response System; and 20 e-reader tablets that can be checked out to students for online reading.

The Intermediate School has a Computer Technology lab with 25 computers and three English labs containing between 11 and 14 computers each; the library has 24 computers which teachers may reserve for their classes. Teachers may also check out materials for use in their classroom including: digital projectors; a Smart board and digital projector; three mobile laptop carts containing 20 computers with wireless networking capabilities; a digital video camera; a set of digital cameras; three Renaissance Response Systems with 24 clickers each; 20 e-reader tablets that can be checked out to students for online reading: and a cart of 25 Kuno tablets that are CIPA Compliant.

The Elementary School has two computer labs with 24 computers, a projector and interactive white board available for teachers to sign out and the library has 8 computers for student use. Teachers may check digital projectors out of the library, and there is also a Personal Response System, and a Renaissance Response System with 24 clickers available. There is also one netbook cart with a total of 27 netbooks and two traditional laptop carts with 24 laptops available to teachers. Additionally the school houses a Math Lab with a digital projector, Smart board and seven computers.

In addition to providing hardware for teachers and students, building level administrators are also given access to advanced hardware. The principals and assistant principals at each school were provided with new tablets at the beginning of the 2013-2014 school year to aid in teacher observations and assessments. In addition to the tablets, they are still provided a laptop to function as their primary device.

In years past, we had an application process whereby teachers could submit an application that would be reviewed and if successful then be awarded a laptop, projector stand, and digital projector (if funds allowed). The teacher laptop program began at the end of the 2008-2009 school year. Beginning in the 2011-2012 school year, we wanted to meet our goals, so we rolled out a laptop to every teacher at the elementary school. The following year, 2012-2013, we were able to expand the rollout to the Intermediate School. The beginning of the 2013-2104 campaign, we were able to reach all the teachers at the high school. As of now, all of our teachers throughout the district have a laptop, projector, and cart assigned. We have a 5 year refresh cycle plan that we intend to abide by to sustain the implementation.

The computer hardware being utilized by the central office staff was replaced in 2011 and will run on a 5 year cycle as well. The computers in the instructional settings have been updated more or less on schedule.

Major strides have been made forward concerning software in Richmond County. A variety of programs are used to protect the machines, the network, and students from viruses and other cyber dangers. Deep Freeze desktop locking software has been installed on all of the computers in the district. Anti-virus software has also been purchased and installed on all of the district's computers. Additionally, filtering software is in place to satisfy the E-Rate and CIPA requirements. The District has entered into a school agreement with Microsoft to keep the office software current and consistent across the school system, and the high school has a site license for Adobe CS5 design premium for graphics and web design.

Professional Development in technology is one of the strengths of Richmond County Public Schools. Each spring, staff members are asked to give input for the kinds of training they would like to see offered as part of the summer in-service program, and using this data, the ITRT coordinates a comprehensive summer program. The program offers a variety of 24-hour courses in instructional technologies, for which teachers are paid stipends. Examples of courses offered during the 2011-2015 technology plan cycle have included: Assessments, Using Smart Boards, using remote response systems; Presentations, using Power Point and other software; You Choose the Software, an independent study; Digital Cameras, Intel Classes; Digital Video Cameras; Technology Survival, an introduction to instructional technology basics; and Laptops in the Classroom, integrating wireless laptops into the curriculum. Additional trainings are held on a monthly basis after school for instructors who seek additional help with the emerging technology.

Richmond County Public Schools current network consists of both WAN and LAN networks. The schools are connected via a gigabit fiber network currently leased through an outside vendor. This allows connectivity for our School Board Office, Elementary School, and Intermediate School. Richmond County's High School connects to the Elementary School via a Gig fiber line. The schools' LAN networks are a mix of 100mb and 10mb switched networks. The Elementary School is the demark location for the network. A Gigabit Fiber line with a 100Mb connection to Metrocast provides internet connectivity to the entire district. All of the district's switches and routers were replaced in summer 2008, and are due to be refreshed in the 2014-2015 school year. Some additional upgrades to the switches and routers occurred in February 2010 when a VOIP phone and paging system was installed across the district. During the summer of 2009 the individual server farms at each school and the district office were consolidated through virtualization to the Elementary school. At the same time the Network operating system was transitioned from Novell to Microsoft. Currently the district is using active directory and has its entire domain and core server functions running on 3 host servers with one controller server. A Storage Area Network was also implemented at this time to serve the needs of the district, the students and staff members. The Storage Area Network, and the servers, which house the virtualization, was replaced in the spring of 2014 due to multiple failing components that were de-stabilizing the current infrastructure. Hard drives and controller cards were being replaced on a bi-monthly basis on the old equipment, and the servers could not be upgraded to the newest technology. The new equipment will allow us to implement new Microsoft server versions, Windows Server 2012, which will allow us to accommodate the introduction of tablets and Apps through the Windows 8 Operating System metro screen. The new system also incorporates a Disaster Recovery plan as data and servers are being backed up to a different location, and can be recovered in the event of a natural disaster.

The county uses a Packeteer to monitor network activity, which also doubles as a device to control many types of network traffic, such as bit torrent and music downloads. A new iboss filter appliance, which is CIPA compliant, is used as the main filtering device for all Internet traffic. All students, beginning in the sixth grade, have individual user ids to log in and save schoolwork in personal storage areas. All staff at Richmond County use a web mail system that is hosted off site to communicate both internally and externally. Our school system participates in online SOL testing at all of the schools, and all of our schools have achieved all readiness certifications for the eSOL web based assessment program.

Current Status

Richmond County Public Schools demonstrates excellence in technology in a variety of ways. The Technology Department at Richmond County Public Schools continues to be compliant with the Standards of Quality, employing one full time computer technician and one year round ITRT (Instructional Technology Resource Teacher). One of the technology staff has been made a full time Data Manager to work with the ever increasing state reports. During the Mid-term review of the technology planning cycle, most of the goals have been achieved and additional planned improvements were realized and put into effect.

Richmond County seeks to make appropriate hardware available to teachers and learners; hence our instructional hardware is constantly updated, and new tools are frequently introduced. Virtually every classroom in the county still has five computers but the individual color ink jet printers were removed, and printing was consolidated into network printers which were placed strategically throughout the schools.

The high school hosts a Business lab with 29 computers and an Office Technology lab with 29 computers, as well as a cart of 25 tablets for the Career in Technical Education classes (CTE). The high school has an additional computer lab of 24 computers for the 8th grade students that were relocated there. An electronic classroom at the high school with video conferencing capabilities and network drops provides an environment used for streaming online classes. A library lab was created at the high school during the summer of 2013 with 26 computers and an interactive white board. The library also houses 12 computers with additional network drops that can be used with laptop computers. A variety of technology materials are available for checkout from the high school library including: Three mobile laptop carts with 24 laptops on each, a netbook cart with 25 devices; several multimedia carts that include digital projectors; a Smart board with projector; a Renaissance Response System; and 20 e-reader tablets that can be checked out to students for online reading.

The Intermediate School was vacated after the Spring 2015 school year. Grades 6 and 7 were moved to a new wing on the Elementary school and grade 8 was moved to the high school. School equipment that was currently in the intermediate school was relocated with the grade level the equipment was provided for. The intermediate wing of the Elementary school consists of 15 new classrooms, 2 computer labs consisting of 24 computers. Each classroom has a smart board, and classroom computers.

The Elementary School has two computer labs with 24 computers, a projector and interactive white board available for teachers to sign out and the library has 8 computers for student use. Teachers may check digital projectors out of the library, and there is also a Personal Response System, and a Renaissance Response System with 24 clickers available. There is also one netbook cart with a total of 27 netbooks and two traditional laptop carts with 24 laptops available to teachers. Additionally the school houses a Math Lab with a digital projector, Smart board and seven computers.

In addition to providing hardware for teachers and students, building level administrators are also given access to advanced hardware. The principals and assistant principals at each school were provided with new tablets at the beginning of the 2013-2014 school year to aid in teacher observations and assessments. In addition to the tablets, they are still provided a laptop to function as their primary device.

In years past, we had an application process whereby teachers could submit an application that would be reviewed and if successful then be awarded a laptop, projector stand, and digital projector (if funds allowed). The teacher laptop program began at the end of the 2008-2009 school year. Beginning in the 2011-2012 school year, we wanted to meet our goals, so we rolled out a laptop to every teacher at the elementary school. The following year, 2012-2013, we were able to expand the rollout to the Intermediate School. The beginning of the 2013-2104 campaign, we were able to reach all the teachers at the high school. As of now, all of our teachers throughout the district have a laptop, projector, and cart assigned. We have a 5 year refresh cycle plan that we intend to abide by to sustain the implementation.

The computer hardware being utilized by the central office staff was replaced in 2011 and will run on a 5 year cycle as well. The computers in the instructional settings have been updated more or less on schedule.

Major strides have been made forward concerning software in Richmond County. A variety of programs are used to protect the machines, the network, and students from viruses and other cyber dangers. Deep Freeze desktop locking software has been installed on all of the computers in the district. Anti-virus software has also been purchased and installed on all of the district's computers. Additionally, filtering software is in place to satisfy the E-Rate and CIPA requirements. The District has entered into a school agreement with Microsoft to keep the office software current and consistent across the school system, and the high school has a site license for Adobe CS5 design premium for graphics and web design.

Professional Development in technology is one of the strengths of Richmond County Public Schools. Each spring, staff members are asked to give input for the kinds of training they would like to see offered as part of the summer in-service program, and using this data, the ITRT coordinates a comprehensive summer program. The program offers a variety of 24-hour courses in instructional technologies, for which teachers are paid stipends. Examples of courses offered during the 2011-2015 technology plan cycle have included: Assessments, Using Smart Boards, using remote response systems; Presentations, using Power Point and other software; You Choose the Software, an independent study; Digital Cameras, Intel Classes; Digital Video Cameras; Technology Survival, an introduction to instructional technology basics; and Laptops in the Classroom, integrating wireless laptops into the curriculum. Additional trainings are held on a monthly basis after school for instructors who seek additional help with the emerging technology.

Richmond County Public Schools current network consists of both WAN and LAN networks. The schools are connected via a gigabit fiber network currently leased through an outside vendor. This allows connectivity for our School Board Office, Elementary School, and Intermediate School. Richmond County's High School connects to the Elementary School via a Gig fiber line. The schools' LAN networks are a mix of 100mb and 10mb switched networks. The Elementary School is the demark location for the network. A Gigabit Fiber line with a 100Mb connection to Metrocast provides internet connectivity to the entire district. All of the district's switches and routers were replaced in summer 2008, and are due to be refreshed in the 2014-2015 school year. Some additional upgrades to the switches and routers occurred in February 2010 when a VOIP phone and paging system was installed across the district. During the summer of 2009 the individual server farms at each school and the district office were consolidated through virtualization to the Elementary school. At the same time the Network operating system was transitioned from Novell to Microsoft. Currently the district is using active directory and has its entire domain and core server functions running on 3 host servers with one controller server. A Storage Area Network was also implemented at this time to serve the needs of the district, the students and staff members. The Storage Area Network, and the servers, which house the virtualization, was replaced in the spring of 2014 due to multiple failing components that were de-stabilizing the current infrastructure. Hard drives and controller cards were being replaced on a bi-monthly basis on the old equipment, and the servers could not be upgraded to the newest technology. The new equipment will allow us to implement new Microsoft server versions, Windows Server 2012, which will allow us to accommodate the introduction of tablets and Apps through the Windows 8 Operating System metro screen. The new system also incorporates a Disaster Recovery plan as data and servers are being backed up to a different location, and can be recovered in the event of a natural disaster.

The county uses a Packeteer to monitor network activity, which also doubles as a device to control many types of network traffic, such as bit torrent and music downloads. A new iboss filter appliance, which is CIPA compliant, is used as the main filtering device for all Internet traffic. All students, beginning in the sixth grade, have individual user ids to log in and save schoolwork in personal storage areas. All staff at Richmond County use a web mail system that is hosted off site to communicate both internally and externally. Our school system participates in online SOL testing at all of the schools, and all of our schools have achieved all readiness certifications for the eSOL web based assessment program.

Future Plans (in addition to our current goals)

- The district's network infrastructure, in particularly the switching, is reaching end of life, and we are pursuing an entire switch upgrade/refresh. The refresh will increase our connection from a 10mb-100mb switched network to a 1 GB switched network. (This work is to begin at the start of the 2015-2016 school year.)

- Starting with the 2016-2017 school year, we will be implementing a 1:1 computer initiative at Rappahannock High School. each student from grade8-12 will receive a laptop.

- In 2016-2017 school year, Kindergarten- 2nds grade will be issued a Chromebook for computer centers.

- We look to provide grades 3-7 a 1:1 computer in the 2017-2018 school year.

- The wireless infrastructure was designed and deployed originally to be used in conjunction with our laptop carts. Various Access Points were placed around each campus to provide coverage everywhere. We would like to increase the saturation of our wireless footprint to accommodate for a 1:1 Initiative. We hope to start increasing this footprint in Fall 2016-2017

- We would like to expand our Professional Development and training opportunities, and work with other regional school districts, as well as increase training via Webinars.

- with the 2016-2017 school year, we will be implementing an online learning management system (LMS), known as Canvas, which would allow every student access to school and class resources 24 hours, 7 days a week.

- We are working towards incorporating electronic textbooks into our district.

- We will consistently review new software and hardware trends for our students to expand their knowledge and development.

- We would like to begin the planning process of running our own Fiber WAN connections between all facilities instead of leasing the current Fiber optics.

- Add an additional staff member to help out with Professional Development.

- Migrate from the NETS standards to a SAMR Model approach.

Review of Accomplishments from Previous Plan

Numerous goals from the previous plan were achieved; here are some of the highlights:

- The bandwidth available to the school was increased from a T1 line, with another T1 line that was used for failover purposes, to a DS3, to a Gigabit Fiber line with a 100Mb connection that is shared out to all of the district locations. This has allowed the school system to ease its filtering policies that were aimed at reducing bandwidth consumption and has greatly increased online instructional opportunities for both students and staff. In June of 2016, This was also just increased to 200MB to accommodate additional traffic with the 1:1 program at RHS.
- A wireless network was put in place throughout the entire district at the start of the 2012-2013 school year, and provides all wireless devices internet connection. Previously we had an access point assigned to each laptop cart, which limited their capability.
- The point-to-point wireless system that had connected the Intermediate school, Elementary school, and School Board Office was replaced with a gigabit fiber network which is leased from an outside vendor. The Bus Garage was also added to the network providing internet connectivity for diagnosing bus engine problems.
- SOL testing is conducted on-line at all of the district schools with only a very small number of "special situation" tests being administered by pencil and paper.
- Every teacher in the district now has a laptop and desktop, projector, and document camera to use as tools for their instruction.
- The district's website is now hosted, and teachers have their own pages to display course material and lesson plans for students and parents to access at all times. It is also much improved in terms of look and feel as well as in ease of use.

Needs Assessment

During the last technology plan, and while actively planning for this new plan, we collected data in a number of ways to assist in our assessment of needs. The technology team conducted interviews with staff members, focus groups with stake holders were held, and institutional data was collected through a variety of methods and compared to the information gleaned from other techniques. Current research, such as the Superintendents Memo's, conferences, and trade shows were also consulted to form a direction for our goals and objectives for this plan. The summary of our findings are below.

Staffing

Currently we are meeting or exceeding the staffing guidelines set forth by the Standards of Quality for Technology related positions. However, for a while we were running short staffed and experienced firsthand the strain such a situation can place on technology departments. With an ever increasing reliance on technology for critical day to day operations, and

with the growing number of devices that need technology support being deployed in the classrooms, we need to be very cognizant of the staffing levels of the technology related positions in Richmond County. We also need to make sure the people filling these positions have the skill sets necessary to positively affect technology in our schools. Having a lead technology contact/teacher at each of the schools would be a great asset to invest in.

Infrastructure

Since our last technology plan we have made many improvements to our infrastructure. We have replaced the wireless point to point system that had connected several of our locations with gigabit fiber. We have replaced all of our internal switches and deployed a VOIP phone system. We now have a pervasive wireless infrastructure at all of our locations. However there are still areas that need improvement. The county is in the process of building a new addition to the high school and elementary school and will be moving grades 6 & 7 to the new elementary school wing. 8th grade will be relocated to the high school wing, and we will become a 2 school system. When this occurs, we will have to make sure that all of the network systems are available in the new facilities. Our new switches are full gigabit switches, and POE capable.

Training

The training program has always been a strength for Richmond County with many varied offerings for the instructional and administrative staff. However, again there is always room for improvement. The instructional staff, as they have more contact with technology in their classrooms, need to be more capable in their basic troubleshooting and networking skills. Too many times the technology staff is called on to plug in a computer to the network or wall outlet, or push the power button on a piece of equipment. We need to revisit the most basic of skills for many of our instructional staff members. Also, the offerings for our instructional and administrative staff are impressive; these opportunities for training need to be carried over to all of our staff members including the technology department. Trainings opportunities are being offered by attending conferences, online classes, webinars, and monthly in-house training sessions that take place after school and on early dismissal days.

Tools

The current replacement schedule for Richmond County calls for classroom computers to be updated on a 5 year rotation period. This has been very difficult to meet, and with the additional problems of inventory creep and request for additional computers in many of the classrooms, it is getting even more difficult. When ordering computers a five year warranty is added whenever possible. The district's six year plan, which was adopted by the

school board in November 2009 calls for all classrooms to be furnished with digital projectors and interactive white boards. In 2014, we went 1 step further by providing digital document cameras for every classroom. The next step is to outfit all classrooms with Smart Interactive boards to engage the students learning. We are approximately 60% of this goal. The school entered into a school agreement with Microsoft for the Office suite so we now have access to the most current version of Office for all district computers. This eliminates the problem of having disparate versions of the Office suite even within the same school. Virtually all of the districts computers were upgraded to the Office 2010 Suite during the 2011-2012 school year and training was offered to district employees to ease the transition. The district has also moved over to a new Student Information System. In October 2008 the district migrated from SASI to Power School. Our instance of Powerschool is hosted by Pearson. Powerschool gives our stakeholders access to grades and other student information from any web connected computer. This has allowed for access to grade books and other tools outside of the classroom and physical buildings of the school, it would be beneficial for our stakeholders to see a continued migration of applications and other tools to be available when off campus.

Goals, Objectives, Strategies, and Evaluation Strategies

Goal 1: Provide a safe, flexible, and effective learning environment for all students and staff.				
Objective 1.1: Deliver appropriate and challenging curricula through face-to-face, blended, and virtual learning environments.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
1.1.1 Increase offerings through and student enrollment in Virtual Virginia online courses.	RHS & RCI Guidance and Building Administration, Tech Director	Ongoing		Student Schedules, Enrollment Records
1.1.2 We will increase participation in dual enrollment courses offered through RCC, and explore options to have the classes taught on site in the district, perhaps through distance learning technology.	RHS & RCI Guidance and Building Administration, RCC Staff,	Ongoing		Student Schedules, Enrollment Records, Room Assignments, Communication w/RCC
1.1.3 Richmond County will continue to send as many students as possible to the Chesapeake Bay Governor's School and continue our close working relationship with the CBGS.	Guidance Counselors, Assistant Superintendent,	Ongoing		CBGS Enrollment Records
Objective 1.2: Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
1.2.1 Maintain Instructional Technology Resource Teacher Position(s) in the district as outlined in the Standards Of Quality.	Superintendent, School Board, Finance Department	Ongoing		Employment Records
1.2.2 Maintain Technology support position(s) to at least the levels outlined in the Standards Of Quality.	Superintendent, School Board, Finance Department	Ongoing		Employment Records
1.2.3 Implement a wireless LAN infrastructure at the district's instructional and administrative sites.	Superintendent, School Board, Finance Department, Technology Director,	May 2013	May 2012	Purchase Orders LAN Maps
1.2.4 Maintain/expand the fiber infrastructure connecting the instructional and administrative sites to include all district sites, and to provide for failure	Superintendent, School Board, Finance Department, Technology Director,	Ongoing Fiber expansion in (FY2017-2018)		Service Agreements/Contracts, Site Plans

of links.				
1.2.5 Maintain/expand VOIP telephone system to include new rooms, facilities, and staff.	Superintendent, School Board, Finance Department, Technology Director,	Ongoing (Upgrade equipment October 2016)		Service Agreements/Contracts, Site Plans
1.2.6 Maintain at least 5:1 student to computer ratio. Currently we have almost a 2:1 student to computer ratio to keep in good standing with the Web-Based Standards of Learning Technology Initiative.	Superintendent, School Board, Finance Department, Technology Director,	Ongoing	Sept 2016 (1:1 at RHS) (2:1 at RCE)	Inventory Lists
1.2.7 Install a streaming media system @ RHS which will allow for the creation, editing, and delivery of video content on premises.	Superintendent, School Board, Finance Department, Building Administrators, Technology Director,	2015 or when new High School is completed		Purchase Orders, Inventory lists
Objective 1.3: Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
1.3.1 Continue summer training workshops with a sustained school year component and stipends.	ITRT, Assistant Superintendent,	Annually		Workshop Attendee Lists, Workshop related communications,
1.3.2 Maintain Regional Educational Consortium Membership and continue to take advantage of training opportunities offered.	Superintendent, School Board, ITRT, Assistant Superintendent	Ongoing		Membership documentation, Training documentation
1.3.3 Maintain/Expand Technology Club for staff members.	ITRT	Ongoing		Club membership roster, Minutes from meetings
Objective 1.4: All eligible E-Rate Services will be requested and applied for on an annual basis				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
1.4.1 Apply for eligible internet WAN/LAN services	Technology Director	Annually according to e-rate timeline		E-rate Documents
1.4.2 Apply for eligible telephone services.	Technology Director	Annually according to e-rate timeline		E-rate Documents
1.4.3 Apply for eligible web hosting and email services	Technology Director	Annually according to e-rate timeline		E-rate Documents
1.4.4 Investigate eligibility for and apply for Priority 2 services.	Technology Director	Annually according to e-rate timeline		E-rate Documents
Goal 2: Engage students in meaningful curricular content through the purposeful and effective use of technology.				
Objective 2.1: Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.				

Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
2.1.1 Leverage our Regional Educational Consortium Membership to provide training to staff members.	Superintendent, School Board, Assistant Superintendent, ITRT	Ongoing		Training documentation, Training attendee lists,
2.1.2 Staff members will be encouraged to attend area educational conferences.	Superintendent, School Board, Assistant Superintendent	Ongoing		Conference attendance documentation
2.1.3 Teachers will be provided with tuition assistance for online courses to encourage their enrollment in them.	Superintendent, School Board, Assistant Superintendent	Ongoing		Tuition reimbursement requests.
Objective 2.2: Actualize the ability of technology to individualize learning and provide equitable opportunities for all learners.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
2.2.1 Continue teacher laptop program to make laptops available to teachers	Superintendent, School Board, Assistant Superintendent, Technology Director, IT Staff	Annually seek applications from interested teachers	Sept 2013	Applications for laptops, Purchase orders, Inventory lists
2.2.2 Evaluate the benefits of implementing Virtual Desktops, and based on the results of the evaluation an implementation date will be set for the VDI	Superintendent, School Board, Technology Director, IT Staff	Ongoing – Installed and Elementary school and high school for student use		Evaluation Materials, Contracts, Purchase Orders,
2.2.3 All educational and administrative software will be evaluated for usage, adequacy, and perception of usefulness (with a district created rubric). Once assessed, software will be updated, replaced or purged based on the results of the evaluations.	Technology Director, IT Staff, ITRT, Assistant Superintendent, Superintendent, School Board	Administrative software will be evaluated by June 30th 2012, Educational Software will be evaluated by June 30th 2013, Remediative actions will be completed by June 30th 2015	April 2016	Evaluation rubrics, Evaluation results, Software inventory lists, Purchase orders, License agreements,
2.2.4 A Technology Policy Manual outlining Standard Operating Procedures dealing with Richmond County Schools' Technology matters will be developed and distributed to stakeholders (staff, students, parents, community)	Technology Director, IT Staff, ITRT, Assistant Superintendent, Superintendent, School Board	Manual will be completed and approved by June 2012 and will be distributed to stakeholders by October 2012	Sept 2013 Sent at the start of each school year, and to new enrollments	Copy of Manual, Minutes from approval, Records of distribution,
2.2.5 On line assessment tools, such as Interactive Achievement and Study	Technology Director, IT Staff, ITRT, Assistant Superintendent, Building	Ongoing		Pre & post tests, Data evaluations, Lesson plans

Island, will be used to inform teacher's instruction through the use of pre & post test data	Level Administrators, Superintendent, School Board			
Objective 2.3: Facilitate the implementation of high-quality Internet safety programs in schools.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
2.3.1 Evaluate the Acceptable Use Policy making sure it takes into consideration current and emerging technologies as well as reflects the current educational policies of the district.	Technology Team	Bi-Annually (At Least) (Updated June 2016)		Policy, Board Meeting Minutes
2.3.2 Evaluate the classroom level internet safety program and adjust as necessary to accommodate trends and innovations.	ITRT, Building administrators, Instructional Staff	Bi-Annually (At Least)		Internet safety program, Board Meeting Minutes
Objective 2.4: Provide necessary support to allow all instructional and support staff to use technology to perform basic job functions.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
2.4.1 Annual training for the Powerschool student information system will be offered for staff members, with job specific training being available.	Technology Director, IT Staff, ITRT, Assistant Superintendent, Building Level Administrators, Superintendent, School Board	To be conducted annually before the school year commences, with specialized training scheduled as needed.		Training schedules, Training attendance, Training outline
2.4.2 Annual training on the use of the Richmond County VOIP phone system and computer network will be offered for staff members.	Technology Director, IT Staff, ITRT, Assistant Superintendent, Building Level Administrators, Superintendent, School Board	To be conducted annually before the school year commences, with specialized training scheduled as needed.		Training schedules, Training attendance, Training outline
2.4.3 The current server storage space will be evaluated and if necessary, expanded/altered to support portfolio storage for individual students.	Technology Director, IT Staff, ITRT, Assistant Superintendent, Building Level Administrators, Superintendent, School Board	Evaluation by summer 2013 If necessary, storage needs modified by summer 2015	Jan-2014	Evaluation rubrics, Evaluation results, Inventory lists, Purchase orders, License agreements
2.4.4 The school cafeterias will be outfitted with technologies to assist in processing students quickly and accurately through food lines.	Technology Director, IT Staff, ITRT, Assistant Superintendent, Building Level Administrators, Superintendent, School Board	Rolling implementation beginning in the Elementary school in 2011 and continuing from there.	Aug-2012	Inventory lists, Purchase orders, License agreements, Training documentation.
Goal 3: Afford students and staff with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understanding.				

Objective 3.1: Provide and support professional development that increases the capacity of teachers to design and facilitate meaningful learning experiences, thereby encouraging students to create, problem solve, communicate, collaborate, and use real-world skills by applying technology purposefully.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
3.1.1 The classes from the Intel® Teach Program will be offered.	ITRT, Assistant Superintendent,	Training will be offered as interest allows		Training schedules, Training attendance, Training outline
3.1.2 The current server storage space will be evaluated and if necessary, expanded/altered to support portfolio storage for individual students.	Technology Director, IT Staff, ITRT, Assistant Superintendent, Building Level Administrators, Superintendent, School Board	Evaluation by summer 2013 If necessary, storage needs modified by summer 2015	Jan-2014	Evaluation rubrics, Evaluation results, Inventory lists, Purchase orders, License agreements
Objective 3.2: Ensure that students, teachers, and administrators are ICT literate.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
3.2.1 Distribute information about current NETS*A standards for administrators, and provide training on how to meet them if needed.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, Building Administrators	All administrators will be compliant with current NETS*A standards by summer 2015		Information distributed, Evaluation rubrics, Training schedules, Training attendance, Training outline
3.2.2 Distribute information about current NETS*T standards for staff, and provide training on how to meet them if needed.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, Building Administrators	All Instructional Staff will be compliant with current NETS*T standards by summer 2015		Information distributed, Evaluation rubrics, Training schedules, Training attendance, Training outline
3.2.3 Distribute information about current NETS*S standards for students, and provide training on how to teach the students to meet them if needed.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, Building Administrators	All students will be compliant with current NETS*S standards by summer 2015		Information distributed, Evaluation rubrics, Training schedules, Training attendance, Training outline
3.2.4 Review evaluation forms at all levels to include current NETS* components.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, Building Administrators	Evaluation forms will include NETS* components by summer 2015		Modified evaluation forms
Objective 3.3: Implement technology-based formative assessments that produce further growth in content knowledge and skills development.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
3.3.1 On-line assessment tools will be provided to staff members and students, such as interactive achievement and study island	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	Summer 2011	Jan-2012	Purchase orders, License agreements
3.3.2 Training and support to use the tools made available at the classroom level will be	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent,	Ongoing		Training schedules, Training attendance, Training outline

provided to the stakeholders who will be implementing them.	School Board, Building Administrators			
3.3.3 EIMS/PEMS solutions accounts will be made available to all core subject area classroom teachers.	Technology Director, IT Staff, Superintendent, School Board	Accounts for teachers will be created and activated by 2012	Eliminated by State	Account lists
3.3.4 Training on how to utilize EIMS/PEMS solutions will be conducted for classroom teachers	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	Training will be conducted after account creation in 2012	Eliminated by State	Training schedules, Training attendance, Training outline
Goal 4: Provide students with access to authentic and appropriate tools to gain knowledge, develop skills, extend capabilities, and create and disseminate artifacts that demonstrate their understandings.				
Objective 4.1: Provide resources and support to ensure that every student and staff member has access to a personal computing device.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
4.1.1 The teacher laptop program will be continued to provide staff members access to laptop computers.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	Ongoing	Sept-2013	Submitted Applications, Purchase orders,
4.1.2 A textbook replacement pilot will be researched and conducted. The platform for the textbook replacement must be determined first. (Apple, Android, Kindle?)	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	Initial research into a platform will be complete summer 2012, make recommendation following that.		Evaluation rubrics, Recommendations, Timeline to follow,
Objective 4.2: Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use a variety of technology tools.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
4.2.1 An electronic help desk will be implemented and users will be trained in its use. All tickets will be submitted via this system in order to track the problems and use the data to make decisions in the technology department.	Technology Director, IT Staff, ITRT, Superintendent, School Board	By 2012	Oct-2011	Sample tickets, Help desk data, Training schedules, Training attendance, Training outline, Decisions made supported by data
4.2.2 Maintain Instructional Technology Resource Teacher Position(s) in the district as outlined in the Standards Of Quality.	Superintendent, School Board, Finance Department	Ongoing		Employment Records
4.2.3 Maintain Technology support position(s) to at least the	Superintendent, School Board, Finance Department	Ongoing		Employment Records

levels outlined in the Standards Of Quality.				
Objective 4.3: Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
4.3.1 Provide training on the use of the TPACK planning tool, and require its use in the formation of teacher lesson plans.	ITRT, Assistant Superintendent, Building Administrators, Superintendent	Re-assessing other programs. Will be decided by 2015		Training Attendance Rosters, Lesson plans
4.3.2 Explore options to update the district's web hosting in order to provide additional features and internet presence	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board	By 2012	Apr-2012	Purchase orders, License agreements, Contracts
4.3.3 Maintain the United Streaming/Discovery Education subscription to provide tools and resources to staff members.	School Board	Annual renewal Safari Montage Media Server was put in place.	Aug-2011	Purchase orders, License agreements, Contracts
4.3.4 The Instructional Technology Resource Teacher will publish an online newsletter highlighting appropriate educational tools and resources available to staff members.	ITRT	Published at least quarterly		Newsletters
Goal 5: Use technology to support a culture of data-driven decision making that relies upon data to evaluate and improve teaching and learning.				
Objective 5.1: Use data to inform and adjust technical, pedagogical, and financial support.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
5.1.1 On-line assessment tools will be provided to staff members and students, such as interactive achievement and study island. These tools will be used to generate reports on student performance.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	Summer 2011	Jan-2012	Reports generated, Data evaluations, Lesson plans,
5.1.2 EIMS/PEMS solutions accounts will be made available to all core subject area classroom teachers.	Technology Director, IT Staff, Superintendent, School Board	Accounts for teachers will be created and activated by 2012	Eliminated by State	Account lists
5.1.3 Staff members will use student response systems to collect, manipulate, and analyze	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent,	By 2013		Data sets

data related to student knowledge and learning.	School Board, Building Administrators			
Objective 5.2: Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
5.2.1 Professional Development will be held for instructional leaders on facilitating data use.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	Ongoing		Training schedules, Training attendance, Training outline
5.2.2 Professional Development will be held for teachers on using data to influence instruction.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	By Sept. 2013, With refreshers as needed Ongoing		Training schedules, Training attendance, Training outline
Objective 5.3: Promote the use of technology to inform the design and implementation of next generation standardized assessments.				
Strategies	Assigned to	Target Date	Objective Met	Evaluation Strategies
5.3.1 Online tools, such as interactive achievement and study island, enable teachers to design and administer web based evaluations	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	Summer 2011 Introducing TEI Training by 2013 Ongoing	Jan-2012 Mar - 2013	Purchase orders, License agreements
5.3.2 An evaluation of web hosting options will be conducted to include tools such as next generation standardized assessments as one of the offerings we would be able to provide through our web portal.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	By 2012		Purchase orders, License agreements, Contracts
5.3.3 Staff members will use student response systems to collect, manipulate, and analyze data related to student knowledge and learning.	ITRT, Assistant Superintendent, Technology Director, IT Staff, Superintendent, School Board, Building Administrators	By 2013		Data sets

Appendix 1 Fiscal Analysis

The Richmond County Public Schools technology department, the programs it supports, and the professional development components of this plan are supported by a variety of methods. The main source of funding comes from the VPSA "Series" grants and from the district's operational budget. When the possibility of the VPSA monies being discontinued was raised during the legislative session, we had questions of how we would keep our technology program operating at the level our users have become accustomed to. Additional sources of funding utilized for technology are the federal title II, part A funds; Carl Perkins money used for career and technical education; and recently some federal stimulus money. Below is a brief synopsis of the funding for the technology program for the 2009 – 2010 fiscal year. It is expected that though there may be slight fluctuations in some of the numbers, most will be fairly consistent from year to year, at least for the foreseeable future.

FY 2009 - 2010			
	Local	**State**	**Federal**
VPSA "Series"	$25,600	$128,000	
Operational Budget	$246,000		
Carl Perkins			$21,804.06
SFSF Funds		$35,331	
Title II, Part A			
Title II Part D			$2,952.45
Title II Part D Stimulus			$7,475.02
Other Federal			$30,982.78
Total:	$271,600	$163,331	$63,214.31
Grand Total:			**$498,145.31**

FY 2013 - 2014			
	Local	**State**	**Federal**
VPSA "Series"	$25,600.00	$128,000.00	
Operational Budget	$312,917.47		
Security	$18,988.00	$75,992.00	
Carl Perkins			$31,333.30
Title I			$22,746.76
Title II, Part A			$4,145.25
Title VI Part B, Sub Part 2			$21,761.22
Total:	$357,505.47	$203,992.00	$79,986.53
Grand Total:			**$641,484.00**

Est. FY 2015 - 2016			
	Local	**State**	**Federal**
VPSA "Series"	$25,600.00	$102,000.00	
Operational Budget	$312,917.47		
Security	$13,028.00	$65,140.00	
E-Rate Category 2	$22,500.00	$112,500.00	
Carl Perkins			$31,333.30
Title I			$22,746.76
Title II, Part A			$4,145.25
Title VI Part B, Sub Part 2			$21,761.22
Total:	$374,045.47	$297,640.00	$79,986.53
Grand Total:			**$733,672.00**

Appendix 2 Acceptable Use Policy

File: IIBE

DIVISION TECHNOLOGY SYSTEM

The Board is committed to the development and establishment of a quality, equitable, and cost effective division-wide technology system. The purpose of the system shall be the advancement and promotion of learning and teaching. Richmond County supports the use of technology for research, communication, instruction, and to provide access to unique resources and opportunities for collaborative work.

This policy applies to all users of the Richmond County Public Schools electronic information, services, hardware, and networks. By using or by accessing Division facilities or services, the user agrees to abide by this policy.

I. TECHNOLOGY PLAN

The Board recognizes that careful planning is essential to ensure the successful, equitable and cost-effective implementation of technology-based materials, equipment, and networks. Given the need for planning the Superintendent or designee shall develop a plan to address the short and long-term technology needs of the division and provide for compatibility of resources among school sites, division offices, and other division operations. In creating this plan the Superintendent or designee shall examine and compare the costs and benefits of various resources and shall identify the blend of technologies and level of service necessary to support the instructional program.

The Superintendent or designee may appoint a technology committee to assist with the above investigations and determinations, and may employ a technology consultant to aid in development of the division's system.

II. SYSTEM USE

The Superintendent shall establish administrative regulations for the use of the division's system.

Failure to abide by division policy and administrative regulations governing use of the division's system may result in the suspension and/or revocation of system access. Additionally, student violations may result in discipline up to and including expulsion. Staff violations may also result in discipline up to and including dismissal. Fees, fines, or other charges may also be imposed.

Adopted: May 13, 1998

_____

_____

IN-SCHOOL NETWORK ACCEPTABLE USE REGULATION

The Richmond County School System in conjunction with local and state funding has developed a computer system which routinely allows student access to technology in all classrooms. The school computer networks are provided to support instructional objectives and student research. Because our computer resources are an important and integral part of the instructional program, access to **in-school** network services is automatically given to all students. However, access is a privilege - not a right - and may be revoked for students who fail to act in accordance with computer use guidelines. As much as possible, technology resources should direct students to those resources which have been evaluated prior to use. Staff should provide supervision during all Internet activities. Users are accountable for appropriate use of resources.

This policy governs student behavior and access to in-school networks. Student access to the Internet is addressed in Regulation IIBEA-R, Acceptable Computer System use.

Student Rules for Computer Use

Student communications and files on the local school network are public and may be monitored at the discretion of school personnel.

Prohibited Activities

The following uses of Division computer networks including Internet access are prohibited by any users:

1. to "hack into" or otherwise access data not intended for the user including, but not limited to, other users' files and administrative data;
2. to share passwords with others, circumvent the menu/password and/or Internet filtering software installed on Division computers;
3. to access, upload, download, create or distribute profane, pornographic, obscene, sexually explicit, or illegal material;
4. to transmit profane, obscene, abusive, sexually explicit, or threatening language that could be characterized as bullying, harassing, or damaging to one's reputation;
5. to vandalize, damage, or disable the property of another individual or organization including destroying data by creating or spreading viruses or by other means;
6. to violate copyright or otherwise use the intellectual property of another individual or organization without permission;
7. to abuse or monopolize technology resources for non-educational use; and
8. to violate any local, state, or federal law.
9. to access the Division computer network with privately owned laptop computers
10. to download and/or install software on the Division's computers

Failure to follow this In-School Network Acceptable Use Regulation will result in the loss of computer privileges and may result in additional disciplinary measures.

Approved by School Board: January 7, 1998

ACCEPTABLE COMPUTER SYSTEM USE

The School Board provides a computer system, including the Internet, to promote educational excellence by facilitating resource sharing, innovation and communication. The term computer system includes hardware, software, data, communication lines and devices, terminals, printers, CD-ROM devices, tape drives, servers, mainframe and personal computers, the Internet and other internal or external networks.

All use of the Division's computer system must be (1) in support of education and/or research, or (2) for legitimate school business. Use of the computer system is a privilege, not a right. Any communication or material used on the computer system, including electronic mail or other files deleted from a user's account may be monitored or read by school officials.

The Division Superintendent shall establish administrative procedures, for the School Board's approval, containing the appropriate uses, ethics, and protocol for the computer system. The procedures shall include:

(1) a prohibition against use by division employees and students of the division's computer equipment and communications services for sending, receiving, viewing or downloading illegal material via the Internet;
(2) provisions, including the selection and operation of a technology protection measure for the division's computers having Internet access to filter or block Internet access through such computers, that seek to prevent access to
    (a) child pornography as set out in Va. Code section 18.2-374.1:1 or as defined in 18 U.S.C. §2256;
    (b) obscenity as defined in Va. Code section 18.2-372 or U.S.C. § 1460; and
    (c) material that the school division deems to be harmful to juveniles as defined in Va. Code § 18.2-390, material that is harmful to minors as defined in 47b U.S.C. § 254(h)(7)(G), and material that is otherwise inappropriate for minors;
(3) provisions establishing that the technology protection measure is enforced during any use of the Division's computers by minors;
(4) provisions establishing that the online activities of minors will be monitored;
(5) provisions designed to educate students about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms and cyberbullying awareness and response;
(6) provision designed to prevent unauthorized online access by minors, including "hacking" and other unlawful activities by minors online; and
(7) provisions prohibiting the unauthorized disclosure, use, and dissemination of personal information regarding minors.
(8) A component on Internet safety for students that is integrated in the division's instructional program.

Use of the School Division's computer system shall be consistent with the educational or instructional mission or administrative function of the Division as well as the varied instructional needs, learning styles, abilities and developmental levels of students. The Division's computer system is not a public forum.

Each teacher, administrator, student and parent/guardian of each student shall sign the Acceptable Computer System Use Agreement before using the Division's computer system. The failure of any student, teacher, or administrator to follow the terms of the Agreement, this policy or accompanying regulation may result in loss of computer system privileges, disciplinary action, and/or appropriate legal action.

The School Board is not responsible for any information that may be lost, damaged or unavailable when using the computer system or for any information retrieved via the Internet. Furthermore, the School Board will not be responsible for any unauthorized charges or fees resulting from access to the computer system.

The Division Superintendent shall submit to the Virginia Department of Education this policy and accompanying regulation biennially.

Adopted: May 13, 1998

Amended: August 11, 1999

Amended: August 8, 2001

Amended: May 8, 2002

Amended: May 11, 2005

Amended: August 9, 2006

Amended: July 10, 2010

Amended: June 13, 2012 (School Board)

_____

_____

Legal Ref.: *Code of Virginia, 1950, as amended, §§ 18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2 and 22.1-78*

18 U.S. C. §§ 1460, 2256
47 U.S. C. § 254

Cross Refs.:	GCPD	Professional Staff Members: Contract Status and Discipline
	GDPD	Support Staff Members: Contract Status and Discipline
	JFC	Student Conduct
	JFC-R	Standards of Student Conduct

ACCEPTABLE COMPUTER SYSTEM USE

All use of the Richmond County School Division's computer system shall be consistent with the School Board's goal of promoting educational excellence by facilitating resource sharing, innovation and communication. The term computer system includes hardware, software, data, communication lines and devices, terminal printers, CD-ROM devices, tape drives, servers, mainframe and personal computers, the Internet and any other internal or external network.

Computer System Use-Terms and Conditions:

1. **Acceptable Use**. Access to the Division's computer system shall be (1) for the purposes of education or research and be consistent with the educational objectives of the Division or (2) for legitimate school business.

2. **Privilege**. The use of the Division's computer system is a privilege, not a right.

3. **Unacceptable Use**. Each user is responsible for his or her actions on the computer system. Prohibited conduct includes:

   - Accessing data not intended for the user including, but not limited to, other users' files and administrative data;
   - Sharing passwords with others, circumventing the menu/password and/or Internet filtering software installed on Division computers;
   - Accessing, uploading, downloading, creating or distributing profane, pornographic, obscene, sexually explicit, or illegal material;
   - Transmitting profane, obscene, abusive, sexually explicit, or threatening language that could be characterized as bullying, harassing, or damaging to one's reputation;
   - Vandalizing, damaging, or disabling the property of another individual or organization including destroying data by creating or spreading viruses or by other means;
   - Violating copyright or otherwise using the intellectual property of another individual or organization without permission;
   - Abusing, wasting, or monopolizing technology resources for non-educational use
   - Violating any local, state, or federal law;
   - Accessing the Division computer network with privately owned computers or other non-approved devices;
   - Downloading and/or installing software on the Division's computers.
   - Using the computer system for private financial or commercial gain.
   - Using the computer system for commercial or private advertising.
   - Using the computer system while access privileges are suspended or revoked.

4. **Network Etiquette**. Each user is expected to abide by generally accepted rules of etiquette, including the following:

   - Be polite
   - Users shall not forge, intercept or interfere with electronic mail messages.
   - Use appropriate language. The use of obscene, lewd, profane, threatening or disrespectful language is prohibited.
   - Users shall not post personal contact information about themselves or others.
   - Users shall respect the computer system's resource limits.
   - Users shall not post chain letters or download large files.
   - Users shall not use the computer system to disrupt others.
   - Users shall not read, modify or delete data owned by others.

5. **Liability**. The School Board makes no warranties for the computer system it provides. The School Board shall not be responsible for any damages to the user from use of the computer system, including loss of data, non-delivery or missed delivery of information, or service interruptions. The School Division denies

any responsibility for the accuracy or quality of information obtained through the computer system. The user agrees to indemnify the School Board for any losses, costs or damages incurred by the School Board relating to or arising out of any violation of these procedures.

6. **Security**. Computer system security is a high priority for the school division. If any user identifies a security problem, the user shall notify the building principal or system administrator immediately. Current security measures include, but are not limited to: managed networks, firewalls, Internet filters, virus control and monitoring devices. Methods to ensure data and network security are reviewed periodically. Problems are identified, evaluated, and addressed. All users shall keep their passwords confidential and shall follow computer virus protection procedures.

7. **Internet Filtering**. As Required by the Children's Internet Protection Act [Pub. L. No. 106-554 and 47 USC 254(h)], Internet blocking and filtering shall be applied to visual depictions of material deemed obscene or child pornography, or to any related material deemed harmful to minors. Subject to staff supervision, technology protection measures may be disabled or, in the case of minors, minimized for bona fide research or other lawful purposes. It shall be the responsibility of all Richmond County Public Schools staff to supervise and monitor usage of the computer network and access to the internet in accordance with applicable Federal and State laws, guidelines, and regulations of the Virginia Department of Education, and School Board policies and regulations.

8. **Vandalism**. Intentional destruction of any part of the computer system through creating or downloading computer viruses or by any other means is prohibited.

9. **Charges.** The School Division assumes no responsibility for any unauthorized charges or fees as result of using the computer system, including telephone or long-distance charges.

10. **Electronic Mail.** The School Division's electronic mail system is owned and controlled by the School Division. The School Division may provide electronic mail to aid students and staff in fulfilling their duties and as an education tool. Electronic mail is not private. Students' electronic mail will be monitored. The electronic mail of staff may be monitored and accessed by the School Division. Unauthorized access to an electronic mail account by any student or employee is prohibited. Users shall be held personally liable for the content of any electronic message they create. Downloading any file attached to an electronic message is prohibited unless the user is certain of that message's authenticity and the nature of the file.

11. **Enforcement.** Hardware and software will be installed on the division's computers having Internet access to filter or block Internet access through such computers to child pornography and obscenity and other activities as outlined in the Children's Internet Protection act (CIPA) in addition to other Federal, State and Local policies and regulations. The online activities of minors may also be monitored manually. The filtering system can be disabled for adults engaged in bona fide research or other lawful purposes. **Any violation of these regulations shall result in loss of computer system privileges and may also result in appropriate disciplinary action, as determined by School Board policy, or legal action**

12. **Strategies Related to the Acceptable Use and Internet Safety Policy**. Ultimately, it is the individual computer system user that is responsible for their actions and what they access while using computer systems. Division schools use Federal and State compliant Internet Filtering, security, and email software on all computer systems in addition to updated virus, intrusion, and spy-ware protection. Although these technological systems are intended to protect students and division data and information, no system is 100% effective. Monitoring and observation using non-technical means is just as important to internet safety and data security and is the responsibility of all division employees.

13. **Internet Safety.** In accordance with Va. Code § 22.1-70.2, students in Richmond County Public Schools receive instruction in internet safety. The division will maintain an Internet Safety Resource Webpage that includes current and diverse resources that can be used by any and all Richmond County Public School Staff member, including but not limited to, parents, caregivers, public library staff, afterschool and

off campus program instructors, or local law enforcement officials. Online distance learning opportunities are available to division Administrators, Faculty, Staff, and Students.

Internet safety and security instruction is the responsibility of instructional personnel at all grade levels and subject areas. The division uses the CyberSmart and NetSmartz curriculum which is structured by grade level or student age. The division will maintain or have certified instructors that can deliver Internet Safety staff development instruction to all staff members on an annual ongoing basis. School level anti-bullying programs as well as relationships already established with local law enforcement programs through the School Resource officers will include Internet safety components.

Richmond County Public Schools recognizes that computer system use is not limited to the school environment and as such, Internet Safety and Security awareness and vigilance must be provided for school and after school use of computer systems.

The division will regularly organize, participate, and promote Internet Safety through PTA meetings, newsletters, consortiums, grant related materials and trainings, and community organization events and meetings. Free internet safety materials and media will be available in public spaces such as the school libraries and be given to students, parents and guardians on request.

Approved by the School Board: January 7, 1998
Amended: August 8, 2001
Amended: May 8, 2002
Amended: May 11, 2005
Amended: June 13, 2012
Amended:

Legal Refs.: Code of Virginia, 1950, as amended, § 18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2 and 22.1-78.
18 U.S.C. §§ 1460, 2256
47 U.S.C. § 254
Guidelines and Resources for Internet Safety in Schools, Virginia Department of Education (Second Edition October 2007)

Cross Refs.:

JFC	Student Conduct
JFC-R	Standards of Student Conduct
GCPD	Professional Staff Members: Contract Status and Discipline
GDPD	Support Staff Members: Contract Status and Discipline

Richmond County Public Schools
Student Computer Acceptable Use Agreement Form

Student's Agreement for Acceptable Computer System Use

I have read the Acceptable Computer System Use Regulation, (IIBEA-R) for the Richmond County Public Schools and I agree to abide by the guidelines these regulations contain. I understand that my failure to use in-school computer resources or the Internet properly will result in school disciplinary action and may result in legal action if behavior warrants. I understand that I may not access the Internet without my parents signed statement below authorizing me to receive Internet access.

Student Printed Name: _____
First Name Middle Initial Last Name
(The technology department needs the student's given name. Please do not use nicknames or middle names on this form.)

Student's Signature _____

Parents' Agreement for In-School Computer Services

As a parent or guardian of this student, I have read the In-School Network Acceptable Use Regulation (IIBEA-R). I understand that my child will automatically be allowed to use in-school computers and computer services and that this use is subject to these acceptable use guidelines and consequences.

Signed: _____ Date: _____

Parents' Agreement for Internet Services

I understand that I must give permission before my child may access Internet resources and that this access is designed solely for limited educational purposes. I also recognize that employees of the school or school system are not able to restrict access to all controversial materials on the Internet. I will not hold school personnel responsible for materials my son or daughter acquires as a result of the use of the Internet from school facilities. I accept full responsibility for supervising my child's use of the Internet outside the school setting.

I give my permission to the Richmond County School System to allow my child to access the Internet.

Signed: _____ Date: _____

Richmond County Public Schools
Employee Computer Acceptable Use Agreement Form

Employee's Agreement for Acceptable Computer System Use

I have read the Acceptable Use Regulation for the Richmond County Schools and I agree to abide by the guidelines these regulations contain. I understand that my failure to use in-school computer resources or the Internet properly will result in school disciplinary action and may result in legal action if behavior warrants.

Employee's Printed Name: _____

Signed: _____ Date: _____

1:1 Device Usage Agreement

Computer use in the 21st Century, and particularly in the classroom, has become an important part of our school's instructional program. To prepare our students to live and work in the 21st Century, and to provide the students of Richmond County the necessary tools to better their future, the Richmond County School System in conjunction with local and state funding will be issuing a computing device for instructional use to every student at Rappahannock High School.

With this program, each student will be provided the opportunity to apply technology effectively to gain knowledge, develop skills, and extend his or her current capabilities. Students will use this device on a daily basis to support and guide their learning.

The following guidelines are necessary to protect the students, the devices, and the school's network and must be followed to ensure this technology serves as an effective instructional tool. Failure to comply with the guidelines may result in disciplinary action and/or legal action.

Students and their parents/guardians must agree to the following:

- The student and parent understand and have signed the Acceptable Computer and Network System Use policy as outlined in section IIBE, IIBE-R, and IIBEA/GAB of the school policy manual.
- The student agrees to follow all RCPS regulations and policies governing the use of the device as well as all applicable State and Federal laws including copyright and intellectual property law pertaining to software and information.
- The student is responsible at all times for the care and appropriate use of the issued device and must adhere to these terms each time the device is used, including when it is not on school grounds.
- The student shall not remove or alter any RCPS identification labels attached to or displayed on the device.
- Students will not deface the device or adhere stickers or other marking that cannot be completely removed by the student when returning the device.
- The student agrees to ensure the device is secure and safe. The student agrees to handle the device carefully and protect it from potential sources of damage.
- The student must report theft (or suspected theft), loss, damage, or malfunctioning of the device to school personnel immediately.
- Upon request, the student agrees to deliver the issued device to RCPS staff for technical inspection or to verify inventory or other information. Students will make available at any time for inspection by any school administrator or teacher any messages, communication, or files sent or received on all RCPS issued device including, but not limited to, the issued device.
- Students will bring their issued device fully charged to school every day.
- The device is the property of Richmond County Public Schools (RCPS). All such issued devices shall be returned to RCPS prior to the conclusion of each school year and prior to the student's withdrawal from the division if earlier than the conclusion of the school year. Failure to return the device will result in appropriate disciplinary action as determined by the school board or legal action.
- The student is aware that this program may be revoked for students who fail to act in accordance with the guidelines stated in the school policy.

The parent/guardian and student will assume the risk of loss by theft, destruction, vandalism, or damage. Devices reported as stolen outside of school require that parents notify police and provide a copy of an official police report to the school administration.

Technology Fees:

- A technology fee of $25.00 will be assessed when the device is issued. Financing is available upon request.
- In some cases, a fee reduction request form may be submitted for families with certain hardships.
- At collection, a $10.00 cleaning fee may be charged for dirty devices or sticker removal, or the device may be cleaned under the supervision of technology staff.

Accidental Damage:

- First incident: No fee for accidental damage to the device – a letter to the parents will be sent regarding the incident. A log entry will also be placed into PowerSchool.
- Second or subsequent incidents: $25.00 fee for accidental damage.

Intentional Damage or Lost/Stolen Devices:

- Full price of repair or replacement for an intentionally damaged device.
- A new device will not be issued until the funds are paid in full.
- Replacement cost of ¼ the cost of the device for lost/stolen device (police report required).

Lost, Stolen, or Damaged AC Adapters:

- Fee of $20.00 for all incidents.

Adopted: May 11, 2016 (by School Board)

Amended:

Cross References:	IIBE	Division Technology System
	IIBE-R	In-School Network Acceptable Use Regulation
	IIBEA/GAB	Acceptable Computer System Use
	IIBEA-R	Acceptable Computer System Use

Richmond County Public Schools

1:1 Device Usage Agreement Form

I have read and agree to comply with the attached guidelines. I have read and agree to abide by all RCPS policies and regulations for the use of equipment including the Acceptable Computer System Use policy, as well as the Code of Student Conduct. I understand the annual technology fee is nonrefundable.

Student: I have read, understand, and agree to honor all terms of the agreement. I may be denied access to the internet and all other electronic media if I do not abide by these terms. I understand that my failure to abide by these terms may result in disciplinary action, or legal action, and the confiscation of the RCPS technology device.

Student's Printed Name_____

Student's Signature_____ Date_____

(Note: Please use legal names on this form.)

Parent/Guardian: I have read and understand this agreement and give permission for the school to allow my child to use the RCPS issued device under the terms and conditions set forth above.

Parent's Printed Name_____

Parent's Signature_____ Date _____

Richmond County Public Schools

P. O. Box 1507 ▪ 460 Main Street
Warsaw, Virginia 22572
804/333-3681 (fax) 804/333-5586
www.richmond-county.k12.va.us

Media Release Signature Page

Richmond County Public School's personnel enjoy taking pictures of activities and events that occur in the school or in the classroom. Our schools and teachers would like to share the successes and achievements of our students with the community, region, state, and nation. If photographs are taken, it would be for the purpose of educating students, promoting the school, and/or promoting public education.

There are a variety of methods to announce and publish student successes. These announcements can include the picture and name of a student or just a student's name.

- ☐ Class Acts- Richmond County Public School's publication
- ☐ Local Newspapers
- ☐ School Newspapers
- ☐ Individual teacher or school newsletters
- ☐ World Wide Web - Richmond County Public Schools webpage/website
- ☐ Videotaping or reporters asking questions
- ☐ Radio and television broadcasting

Please indicate below if you opt for your child's picture and/or name to be published within the following media

Television, Radio, and Newspaper (See Policy Information on Back)	
_____	I **DO** give permission for my child to be photographed, videotaped, and/or interviewed by members of the television, radio, or newspaper media (school or local newspapers).
_____	I **DO NOT** give permission for my child to be photographed, videotaped, and/or interviewed by members of the television, radio, or newspaper media (school or local newspapers).
School Website/Webpage	
_____	I **DO** give permission for my child to be photographed and/or videotaped for presentation on the Richmond County Public Schools' Internet webpage/website.
_____	I **DO NOT** give permission for my child to be photographed and/or videotaped for presentation on the Richmond County Public Schools' Internet webpage/website.

_____ _____
Printed Student Name Homeroom Teacher

_____ _____
Parent/Guardian Signature Date

DIRECTORY INFORMATION

The Richmond County Public Schools shall notify parents and eligible students on request at the beginning of each school year what information, if any, Richmond County school division has designated as directory information, the right to refuse to let the division designate any or all of such information as directory information and the period of time to refuse, in writing, the directory information designation in accordance with FERPA.

Richmond County Schools has designated the following information as directory information:

- Student's name
- Address
- Telephone listing
- Electronic mail address
- Participation in officially recognized activities and sports
- Weight and height of members of athletic teams
- Photograph
- Degrees, honors, and awards received
- Date and place of birth
- Major field of study
- Grade level
- The most recent educational agency or institution attended

Richmond County Public Schools

Internet Safety Program

2012

Appendix 3

Table of Content

Technology Internet Safety Philosophies and Strategies..... 3

Roles and Responsibilities……. 4

Filtering and Monitoring Process…… ….. 6

Data Network Security/Breach of Security & Consequences …… …..... 7

Professional Development ……. ... 8

Community Resources/History ……. 10

Internet Safety Curriculum (CyberSmart) Grades K-1…….……....12

Internet Safety Curriculum (CyberSmart) Grades 2-3……. … 14

Internet Safety Curriculum (CyberSmart) Grades 4-5……. 17

Internet Safety Curriculum (CyberSmart) Grades 6-8……. 22

Internet Safety Curriculum (CyberSmart) Grades 9-12……... 27

More Suggested Resources to Teach Internet Safety ……. 31

Technology Internet Safety Philosophies and Strategies

Philosophy

Richmond County Public Schools focuses on technology integration because it is essential to prepare our students for the 21st Century. We believe all students and all personnel should have adequate and equal access to training and literacy for technology. We seek to promote student access to the use of computers, the network, the internet, and other related technologies. Technology fosters creativity, encourages higher order thinking, and motivates students to learn. Training students and school personnel is key to the successful implementation of Internet safety and technology in our schools.

Strategies

- Each student and personnel user will be required to sign an Acceptable Usage Policy (AUP) Agreement. After the completion of this form, the users will be given a username and password to access the network and the Internet.
- Each teacher will be given a copy of the Richmond County Public Schools (RCPS) Internet Safety Program. This program will give the teachers necessary information to teach Internet Safety to their students during their regular instructional day.
- RCPS will provide Internet Safety information on the schools webpage for the parents, students, staff, and community.

Roles and Responsibilities

All roles and responsibilities will be reviewed annually as part of the overall evaluation of the program. Roles and responsibilities will be updated as needed to promote student safety.

Technology Department (Director, Network Manager, Data Manager)

- Monitor network and Internet usage
- Report any potential AUP violations to administration
- Maintain filtering technology for all Internet traffic and seek input from school personnel regarding additional filtering requirements
- Serve as a liaison between the VDOE and the school district
- Evaluate the effectiveness of the Internet Safety Program
- Provide usernames and log-ins to school personnel and students after they return the signed AUP
- Responsible for securing testing log-ins for testing purpose only

Administrators

- Enforce AUP and adhere to discipline guidelines in the Student Code of Conduct and AUP
- Ensure the faculty members consistently implement and enforce the Code of Conduct and AUP in their classrooms
- Monitor student and teacher usage of the computer and Internet to ensure that quality websites are being used in the classroom
- Respond to any cyberbullying claims
- Make sure teachers are teaching Internet safety skills to their students in lesson as needed
- Seek input from the staff regarding filtering sites

Teachers and Qualified Staff Members

- Set and enforce classroom expectations that are consistent with the Code of Conduct and AUP
- Report any AUP violations to the administrator
- Use individual given log-in information only
- Incorporate the Internet safety curriculum into current curriculum
- Consistently monitor students' Internet use by circulating the room or using a monitoring software on a regular basis
- Be aware of current topics or issues that surround the Internet such as: cyberbullying, cyberstalking, and plagiarism and how to report them

Instructional Technology Resource Teacher (ITRT)

- Enforce AUP and adhere to discipline guidelines in the Student Code of Conduct and AUP
- Provide training to staff and school personnel on Internet safety concepts
- Provide training to teachers on how to properly monitor student computer usage using a monitoring software
- Be familiar with and report all claims of cyberbullying
- Provide Internet safety resources to teachers, parents, students, and community members
- Offer school personnel opportunities to teach Internet safety issues to the students

Librarians

- Set and enforce classroom expectations that are consistent with the Code of Conduct and AUP
- Report any AUP violations to the administrator

- Be aware of current topics or issues that surround the Internet such as: cyberbullying, cyberstalking, and plagiarism and how to report them
- Consistently monitor students' Internet use by circulating the room or using a monitoring software on a regular basis
- Work with teachers to raise students' awareness and understanding of copyright and documentation guidelines

Guidance Counselors

- Report any AUP violations to the administrator
- Be aware of current topics or issues that surround the Internet such as: cyberbullying, cyberstalking, and plagiarism and how to report them
- Offer additional resources to students, parents, and teachers on Internet safety and cyberbullying
- Incorporate the Internet safety curriculum into current curriculum

Students

- Return signed AUP and Code of Conduct
- Abide by the AUP and Code of Conduct
- Report any AUP violations to a teacher
- Agree to log in using given log-in only
- Agree not to visit any blocked or inappropriate sites in any manner
- Agree not to post or send inappropriate language or images via email or chat rooms
- Student will not conduct in cyberbullying and will report any instances of cyberbullying to a teacher
- Learn and understand the dangers on the Internet and strive to be safe when online

Filtering and Monitoring Process

Richmond County Public School uses the Sophos Web Appliance Filtering software to filter or block access through Internet connected computers. The filter will block child pornography and obscenities. Sophos Web Appliance is a secure web gateway solution that provides integrated protection against malware and unwanted web content. They are built on a robust hardware platform that delivers high-capacity, high-availability security. The appliance provides complete protection enabling risk free internet productivity. Sophos Web Appliance:

- Protect users from malware, spyware, FakeAV, viruses and phishing.
- Guard against hijacked trusted sites.
- Enable productivity and enforce internet use policies.
- Block anonymizing proxies.
- Scan encrypted HTTPS traffic.
- Preserve bandwidth.

Sophos multi-stage filtering

Sophos uses a unique 3-stage filter to protect against fast moving, rapidly changing, and highly sophisticated modern web threats that traditional URL filters cannot stop.

URL and proxy filtering augmented with unique reputation risk classification data across all categories with anonymizing proxy detection to ensure compliance.

Real-time anti-malware filtering with Sophos Behavioral Genotype protection and JavaScript emulation that detects even the most advanced zero-day threats in both HTTP and HTTPS encrypted traffic.

Content filtering includes a rich set of policy options for controlling file-types, potentially unwanted applications (PUAs), malware attempts to call home, and the posting of sensitive data to internet sites such as webmail, forums, or blogs.

Accessibility Levels

Students have much lower accessibility level than teachers. The block can be disabled for adults engaging in bona fide research or other lawful purposes.

RCPS also has a classroom management software known as Impero. Impero allows teachers, administrators, and the Technology Department to monitor and record unlimited numbers of student screens in real-time, view current and previously viewed windows, websites, and applications, printed documents, and deleted files. It can also detect written keywords or sentences with screenshots or video evidence and view evidence of attempts to view blocked windows, websites, and applications. Impero will instantly alert the monitor of violations: such as accessing blocked websites

Data and Network Security

RCPS also has Sophos Anti-Virus which allows for the Director of Technology to centrally manage multiple platforms. The consolidated management console allows the technology director to defend every endpoint on more than 25 platforms. It automatically updates and centrally manages antivirus and client firewall. This software protects students and staff anytime, anywhere. Sophos monitors and controls updates to continually protect students and staff, even when they connect to the school network from home. It also eliminates malware and offensive content. Sophos Email Security and Data Protection integrates antivirus, anti-spam and policy enforcement capabilities to protect students without restricting freedom of communication. Sophos Anti-Virus enables safe, productive web browsing and protects your network from dangerous websites and easily enforces acceptable Internet use policies.

The Technology Director manages all data and network security measures. Each teacher and staff member is given their own unique username and password to access their user accounts. This account provides them access to a: personal e-mail account, their personal documents, the student folders in their school, the teacher shared folders, the various software that have been installed, and the Internet. Students in grades six through twelve are also given a unique username and password to access their user account. This account provides them access to: their personal documents, the Internet, the student shared folders, and the various software programs that have been installed. Students in grades Kindergarten through fifth grade have a universal login that gives the students access to the student shared drive, the Internet, and the various software programs installed on the computer.

Procedures to Address Breach of Security and/or Safety and Consequences

Any infraction of the regulations set forth by the AUP and Code of Conduct will not be tolerated and RCPS will act quickly to ensure student and personnel safety. Minor security and safety concerns will be handled by the building administrator. Examples of minor infractions are: accessing inappropriate websites and using another students or teachers login to access the network. Major security and safety concerns will be handled by the Superintendent, Assistant Superintendent, or Director of Technology. If the infractions violates local, state, or federal laws then outside agencies will be contacted.

Consequences: At any time, a report detailing both Internet usage and e-mail usage can be created. Inappropriate usage can result in the following actions.

Teachers/Personnel

- Loss of Internet access only

- Loss of all network privileges
- Letter of reprimand
- Removal from job/responsibilities/loss of job

Students

- Loss of Internet access only
- Loss of all network privileges
- Parental Conference
- Suspension/Expulsion

Professional Development

The Virginia Department of Education requires schools to teach students the following topics on Internet Safety:

http://www.doe.virginia.gov/support/safety_crisis_management/internet_safety/guidelines_resources.pdf

The Internet is a powerful tool that should be used wisely.

a. The Internet allows students access to a vast library of previously unavailable resources.
b. The Internet enables students to communicate with people around the world.
c. The Internet provides a creative outlet for students skilled in writing, art, music, science, mathematics, and other topics.

Students need to know that not all Internet information is valid or appropriate.

a. Sexually explicit material or violent images can affect students negatively.
b. Sexual predators will try to convince students to trust them.
c. Internet information may promote negative attitudes, such as hate or intolerance, and dangerous or illegal activities, such as self-injuring behavior, gambling, and illegal drug use.

Students should be taught specifically how to maximize the Internet's potential while protecting themselves from potential abuse.

a. The critical-thinking skills students learn in the classroom, library, and lab should be applied to Internet resources and Web searching.
b. Students need to know what to do and who to ask for help when they encounter a person or site on the Internet that is offensive or threatening to them.
c. Students and adults are required by law to report illegal Internet communications and activities to Internet Service Providers and local law enforcement authorities

Internet messages and the people who send them are not always what or who they seem.

a. People in chat rooms, instant message "buddies," or those who visit a blog or wiki may not be who they appear to be. Students should learn to recognize when someone is potentially dangerous.
b. Students need to realize when an Internet encounter may be questionable and how to protect themselves when this occurs.
c. E-mail can cause malicious code- infection problems for a computer or network. Students should not open e-mail or attachments from unknown sources.
d. Students need to know which information is safe to share with others online, which should never be shared, and why sharing it could put them at risk.
e. Students never should reveal online any information about where they live or attend school.
f. Students need to be aware their electronic messages, even those with known friends, can leave
g. electronic footprints that can be misused by others.

Predators and cyberbullies anonymously use the Internet to manipulate students. Students must learn how to avoid dangerous situations and get adult help.

a. Sexual predators deceive students by pretending to be students themselves. They sometimes lure young people into a false sense of security or blind trust and try to alienate them from their families. Students need to learn about these types of psychological ploys and how to get immediate adult help.
b. Bullies use Internet tools, such as instant messaging and the Web, to harass or spread false rumors about students. Students need to know how to seek proper help in these potentially dangerous situations.
c. Students need to know that posting personal information and pictures can allow predators to contact and begin grooming them for illegal meetings and actions. Personal photos can be easily misused or altered when posted on the Internet.

Internet activities, such as playing games and downloading music or video files, can be enjoyable. Students need to know which activities are safe and legal.

a. Gaming sites can attract sexual predators and/or cyberbullies.
b. Some games may contain pornographic and/or violent images. Students need to talk with parents about what is acceptable.
c. Students need to know how to detect whether a specific file download is legal and/or free of malicious code.

The Instructional Technology Resource Teachers (ITRT) Professional Development

- Be responsible for providing teachers, students, parents, and community members with the tools to assist them in learning more about Internet safety.
- Goal to train all teachers on how to educate students about Internet safety concepts. Training for teachers will include proper procedures for using computers and the Internet so that they follow the guidelines set forth in the AUP.
- Provide grade level appropriate materials to the teachers on Internet safety concepts that teachers can include in their curriculum
- Post Internet safety materials on the webpage for the community.
- Provide after-school professional development opportunities to educate teachers on the newest threats to Internet safety
- Attend grade level or departmental meetings to check on the implementation of the Internet Safety materials
- Try to implement an Internet Safety Week for RCPS, the ITRT will: hold a poster contest, parental communication night, and distribute Internet Safety materials to the students and teachers

Community Resources

The ITRT will:

- Place useful information about Internet safety on the RCPS webpage
- Send home information about Internet safety with students
- Place winners of Internet safety poster contest in the Northern Neck News

Internet Safety Program and Policy Updates and Revisions

RCPS Technology Department will review and update the Internet Safety Program annually. Once the program has been updated and reviewed, the department will have it approved by the School Board. As part of this annual revision and update:

- Teachers will complete a survey about the methods in which they taught Internet safety in their classrooms
- Roles and Responsibilities will be reviewed in detail to ensure that the AUP was enforced by all personnel (Use Impero and Sophos data)
- Review any new Virginia Department of Education guidelines and incorporate them into the revised and updated Internet Safety Program
- Make any changes deemed appropriate to the AUP and have these changes approved by the School Board

History of Implementation

Brief Outline:

1. First, we provided training for our teachers: During the 2007-2008 school year our teachers participated in an online course designed to increase their awareness of Internet Safety issues through online readings, exploration of resources, and forum participation. The participants were required to suggest ways they would incorporate Internet Safety messages in their curriculum. (This course is still available for new teachers.)
2. Teachers working on curriculum projects during the summer of 2008 participated in an Internet Safety meeting where they took another look at ways to share the Internet Safety message within the context of their new curriculum pieces.
3. We provided the training in order to prepare our teachers to include Internet Safety lessons within the context of their courses, and they are addressing Internet Safety as part of their ongoing curricula.
4. In addition to the core subject teachers, the school librarians and the elementary guidance counselor developed special lessons, parent presentations, and/or web page content which they planned to present during the 2008-2009 school year.

ONLINE PROFESSIONAL DEVELOPMENT COURSE

Internet Safety & Copyright for Educators — 1/25/2008

Richmond County Public Schools contracted with Karen Richardson to develop an online professional development Moodle course on Internet Safety. If you are interested in enrolling in the Internet Safety Moodle, please contact Karen about creating a course specifically for you (karen@ivyrun.com).

Richmond County teachers who complete this required course earn 10 recertification points. Their coursework (reading, web site searches, and contributions to four forum topics) is expected to take 10 to 12 hours. Some of the teachers have worked in grade level groups and some have worked independently.

This course meets the requirement that faculty members learn about Internet safety and begin making lessons that incorporate the concepts. We will work on Internet safety curriculum in a workshop setting this summer, so the teachers can develop and redesign lessons using what they have learned in this Moodle course.

Internet Safety—a three-hour tour for curriculum writers — 8/14/2008

Karen Richardson, leader witchyrichy.wikispaces.com/internetsafety

BULLYING—

- First of the year teach respect with frequent reminders. R-E-S-P-E-C-T
- What to do? Separate them or put them together! Make them do a project together.

  - ✓ Use email to communicate in a positive way
  - ✓ Parent education: pos in instant messaging means parent over shoulder.
  - ✓ Parents have to be allies.
  - ✓ Create a web page for parents.
  - ✓ We have an obligation to educate the public.

- ✓ Internet safety as part of citizenship and health/PE
- ✓ They need to know that **What you post stays there.**
- ✓ Tell parents: Be a 'friend' of their kids on their facebook and my space accounts; keep the computer screen facing out in a public room in the house.
- ✓ Predators, cyberbullying
- ✓ Help kids become smart users of the Internet as a research tool. Help them learn to evaluate and identify bias.
- ✓ Examples on Wikispace page –including a quiz that's good for parents.
- ✓ Karen for pres- (pal)-
- ✓ Museum of Hoaxes—fun-not necessarily true
- ✓ Snopes.com
- ✓ Edit Wikipedia (grammar); be a Wikipedia editor (content): Have students create accounts and log in – gives them responsibility and accountability.
- ✓ Parents—NetSmartz—request a presentation/valid for two days.
- ✓ Create a poster for computer area (contest in school?)
- ✓ Need to hear the rules often. Teach the students how to decide which are good websites by telling them, "Here's why I selected this website."
- ✓ Students can make videos about Internet safety and post them to Teacher tube. Also, search TT for Internet safety clips.

Richmond County Public Schools Internet Safety Suggested Curriculum

Resources & Ideas

CyberSmart! Free Student Curriculum- Scope and Sequence

http://cybersmartcurriculum.org/

Grades K-1 CyberSmart Curriculum and Links		
Unit	**Topic**	**Lesson Overview and Link**
Safety and Security Online	**Private Identity Information** Students experience the excitement and power of the Internet while learning safety and security rules to protect their identities online, not only in terms of personal safety but in context of identity theft.	**Go Places Safely** This is a virtual field trip that helps children experience the power and excitement of the Internet by taking them places in cyberspace that might be impractical for a class visit. They also learn that, just as when traveling in the face-to-face world, they should always take an adult with them when traveling in cyberspace. http://cybersmartcurriculum.org/safetysecurity/lessons/k-1/go_places_safely/
Manners, Cyberbullying, and Ethics	**Ethics and Property** Students explore the concepts of property and learn to use hardware, networks, and intellectual property ethically.	**Is This Yours?** Children learn that computers, like other objects, are property and should be respected. http://cybersmartcurriculum.org/challenges/lessons/k-1/cyberspace_at_school/
Research & Information Fluency	**The Nuts and Bolts of Searching** Students learn a variety of strategies for locating information using search engines and directory sites.	**A-B-C Searching** Children search animal pictures online by clicking letters of the alphabet. They then print the pictures and, in an offline activity, color then and arrange a display. http://cybersmartcurriculum.org/researchinfo/lessons/k-1/abc_searching/
	Evaluating Web Sites Students applying given criteria to determine the usefulness and appropriateness of informational Web Sites.	**Good Sites** Children explore and evaluate a children's Web site, concluding that people's opinions about quality and

		usefulness of sites vary. http://cybersmartcurriculum.org/researchinfo/lessons/k-1/good_sites/
Research & Information Fluency	**What About Library** Students consider the value of librarians as sources of information in electronic and other forms.	**The Library** Children learn that the library houses many forms of media for both research and leisure activities. They also learn that an important resource in the library is the librarian. http://cybersmartcurriculum.org/researchinfo/lessons/k-1/the_library/
	Recognizing Commercial Intentions Students learn that many Web sites are intended to sell, advertise, or promote products or services.	**Find the Ad** Children learn that the purpose of advertisements is to encourage people to buy something; children also practice differentiating ads from content on Web sites. http://cybersmartcurriculum.org/researchinfo/lessons/k-1/find_the_ad/
Twenty-First Century Challenges	**Communication Inventions** Students learn how the Internet relates to communication inventions of the past.	**Spread the News!** Children learn what it means to communicate, recognize the computer as a communication invention, and plan their own way to communicate a message. http://cybersmartcurriculum.org/challenges/lessons/k-1/spread_the_news/
	What is Cyberspace? Students conceptualize the geography of cyberspace and explains how it relates to the places they know.	**Cyberspace at School** Children explore the concept of cyberspace as a means of communicating with real people within their school. http://cybersmartcurriculum.org/challenges/lessons/k-1/cyberspace_at_school/

Grades 2-3 CyberSmart Curriculum and Links

Unit	Topic	Lesson Overview and Link
Safety and Security Online	**Private Identity Information** Students experience the excitement and power of the Internet while learning safety and security rules to protect their identities online, not only in terms of personal safety but in context of identity theft.	**What's Private** Children learn about the power of the Internet to facilitate collaboration among students worldwide. While co-writing a story online, students learn an important safety rule: Before sharing private information in cyberspace, they must get permission from a parent or teacher. http://cybersmartcurriculum.org/safetysecurity/lessons/2-3/whats_private/
	Online Privacy Students learn that commercial Web sites collect information about visitors and how to recognize whether such sites protect privacy.	**Filling Out a Form-Ask First** Students learn that many Web sites have enticing offers in exchange for information and discuss how to responsibly handle such offers. http://cybersmartcurriculum.org/safetysecurity/lessons/2-3/filling_out_a_form_ask_first/
Manners, Cyberbullying, and Ethics	**Cyberbullying** Students examine their own and others behavior and learn what constitutes cyberbullying. They also learn how to deal with cyberbullying.	**Everyone Wants Friends** Students examine face-to-face bullying behaviors and identify why these behaviors create problems. They role-play to find ways to resolve the problem and create a poster of "No Bullying" rules. http://cybersmartcurriculum.org/cyberbullying/lessons/2-3/everyone_wants_friends/ **Is That Fair** Students learn that bullying behaviors may take place when they are online. They brainstorm slogans to remind one another that they can get help from a trusted adult. http://cybersmartcurriculum.org/cyberbullying/lessons/2-3/is_that_fair/

Manners, Cyberbullying, and Ethics	**Ethics and Property** Students explore the concepts of property and learn to use hardware, networks, and intellectual property ethically.	**Whose Property is This?** Students extend their understanding of "property" to include not only computer equipment but also the work of others, and then discuss rules for respecting such property. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/2-3/whose_property_is_this/
	Netiquette Students learn the dos and don'ts of good manners in cyberspace.	**Good Manners Everywhere** Students discuss good manners in the face-to-face world and learn some dos and don'ts for using E-mail in cyberspace. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/2-3/good_manners_everywhere/
Research & Information Fluency Research & Information Fluency	**Search Engines and Directories** Students learn that different search sites offer different features and ways of searching.	**Subject Category Search** Selecting subject categories is one of two main search tools used on the Internet. Students learn how to best select subject categories in a directory and explore the concept of narrowing their search. http://cybersmartcurriculum.org/researchinfo/lessons/2-3/subject_category_searching/
	The Nuts and Bolts of Searching Students learn a variety of strategies for locating information using search engines and directory sites.	**Using Keywords** Keyword searching is an effective way to locate information on the World Wide Web. Students learn how to select keywords to produce the best search results. **http://cybersmartcurriculum.org/researchinfo/lessons/2-3/using_keywords/**
	Evaluating Web Sites Students applying given criteria to determine the usefulness and appropriateness of informational Web Sites.	**Finding Good Sites** Students explore, evaluate, and compare several children's informational Web sites, concluding that people's opinions about the quality and usefulness of sites will vary. http://cybersmartcurriculum.org/researchinfo/lessons/2-3/finding_good_sites/

	What About Library Students consider the value of librarians as sources of information in electronic and other forms.	**Ask the Librarian** Students learn the library is the best place to begin research, because the librarian can help them find information in all kinds of media. http://cybersmartcurriculum.org/researchinfo/lessons/2-3/ask_a_librarian/
Research & Information Fluency **Research & Information Fluency**	**Recognizing Commercial Intentions** Students learn that many Web sites are intended to sell, advertise, or promote products or services.	**Things for Sale** Students learn that some Web sites are advertising environments intended to promote good feelings about products. http://cybersmartcurriculum.org/researchinfo/lessons/2-3/things_for_sale/
Twenty-First Century Challenges	**Communication Inventions** Students learn how the Internet relates to communication inventions of the past.	**What's the Big Idea** Students recognize people's need and desire to communicate as they describe and classify past and present communications inventions. http://cybersmartcurriculum.org/challenges/lessons/2-3/whats_the_big_idea/
	What is Cyberspace? Students conceptualize the geography of cyberspace and explains how it relates to the places they know.	**My Cyberspace Neighborhood** Students explore the concept of cyberspace as a means of connecting people and explain how the ability to communicate can unite a neighborhood. http://cybersmartcurriculum.org/challenges/lessons/2-3/my_cyberspace_neighborhood/

Grades 4-5 CyberSmart Curriculum and Links

Unit	Topic	Lesson Overview and Link
Safety and Security Online	**Private Identity Information** Students	**Private Information** By examining and identifying actual online requests for private information, students learn to apply the same safety

	experience the excitement and power of the Internet while learning safety and security rules to protect their identities online, not only in terms of personal safety but in context of identity theft.	rules in cyberspace as they use when encountering strangers in the face-to-face world. http://cybersmartcurriculum.org/safetysecurity/lessons/4-5/private_information/
	Meeting People Online Students learn that, although they may develop rewarding online relationships, the people they meet in cyberspace must be treated as strangers.	**Safe Talking in Cyberspace** Students learn that they can develop rewarding online relationships, but they should never reveal private information to a person they know only in cyberspace without asking their parent or guardian for permission. http://cybersmartcurriculum.org/safetysecurity/lessons/4-5/safe_talking_in_cyberspace/
	Security Students learn how to handle e-mail, messaging, texting, password-protected accounts, and computer network security.	**Powerful Passwords** Students learn the benefits of using passwords and then play a board game to discover some strategies for creating and keeping secure passwords. http://cybersmartcurriculum.org/safetysecurity/lessons/4-5/powerful_passwords/ **Handling E-Mail and IM** Students consider the positive uses of e-mail and instant messaging and identify strategies for responsibly managing spam and other messages that make them uncomfortable. http://cybersmartcurriculum.org/safetysecurity/lessons/4-5/handling_e-mail_and_im/
	Online Privacy Students learn that commercial Web sites collect information about visitors and how to recognize whether such sites protect privacy.	**Privacy Rules** Students learn that children's Web sites must protect their private information, and look for privacy policies and privacy seals of approval. http://cybersmartcurriculum.org/safetysecurity/lessons/4-5/privacy_rules/

Manners, Cyberbullying, and Ethics	**Cyberbullying** Students examine their own and others behavior and learn what constitutes cyberbullying. They also learn how to deal with cyberbullying.	**The Power of Words** Students consider that while they are enjoying their favorite children's Web sites, they may encounter messages from other children that can make them feel angry, hurt, sad, or fearful. They explore ways to handle a particular cyberbullying situation, learn some basic prevention rules, and propose actions to take to calm down when online language makes them angry. http://cybersmartcurriculum.org/cyberbullying/lessons/4-5/the_power_of_words/ **Group Think** Students learn that sometimes youths in groups think and behave differently than they would if each person was alone. They examine the role of the bystander in cyberbullying situations and develop an ethical pledge for bystanders. http://cybersmartcurriculum.org/cyberbullying/lessons/4-5/group_think/ **Be Comfortable** Students consider some online scenarios and examine their personal comfort levels. They learn to recognize such feelings and responsibly manage their actions in cyberspace. http://cybersmartcurriculum.org/cyberbullying/lessons/4-5/be_comfortable/
	Cyber Citizenship Students consider the power and responsibilities of citizenship in cyberspace, including adherence to their school's Acceptable Use Policy.	**Citizens of Cyberspace** Students learn that Internet users are citizens of a global community with the power to share ideas with people around the world. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/4-5/citizens_of_cyberspace/ **Understand Your Acceptable Use Policy** Acceptable Use Policy (AUP) contracts encourage responsible behavior by students and staff and give administrators enforceable rules for acceptable use of school computers. Students will interpret and make inferences about their school's AUP. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/4-5/understand_your_acceptable_use_policy/ **Speak Out** Students learn that, as citizens of their country, they have a responsibility to speak out on important issues and that the Internet provides easy ways to do so. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/4-5/speak_out/

Manners, Cyberbullying, and Ethics	**Ethics and Property** Students explore the concepts of property and learn to use hardware, networks, and intellectual property ethically.	**Whose Is It, Anyway?** Students learn that, although the Internet makes it very easy, copying others' work and presenting it as one's own is unethical. They also learn about circumstances in which it is permissible to copy others' work. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/4-5/whose_is_it_anyway/ **Do the Right Thing** Students learn that they should apply the same ethical principles in cyberspace that guide them in face-to-face situations. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/4-5/do_the_right_thing/
	Netiquette Students learn the dos and don'ts of good manners in cyberspace.	**Good E-Mail Manners** Students learn good manners dos and don'ts when sending E-mail. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/4-5/good_email_manners/
Research & Information Fluency **Research & Information Fluency**	**Search Engines and Directories** Students learn that different search sites offer different features and ways of searching.	**Choosing a Search Site** Through online observations, students record and compare the features of four children's search sites. They then construct a lift-the-flap poster that will guide them in selecting appropriate search sites. http://cybersmartcurriculum.org/researchinfo/lessons/4-5/choosing_a_search_site/
Research & Information Fluency **Research & Information Fluency**	**Evaluating Web Sites** Students applying given criteria to determine the usefulness and appropriateness of informational Web Sites.	**Rating Web Sites** Students discuss and apply criteria for rating informational Web sites, compare their results, and infer that all Web sites are not equally good sources of research information. http://cybersmartcurriculum.org/researchinfo/lessons/4-5/rating_web_sites/
	Homework Help Students examine Web sites for homework help and learn how to correctly cite	**Homework Help in a Hurry** Students learn strategies for getting immediate help with their homework, including going online with an adult to homework help search services and reference databases. http://cybersmartcurriculum.org/researchinfo/lessons/4-5/homework_help_in_a_hurry/ **E-Mailing for Homework Help**

	online sources.	Students visit sites where, with a parent or guardian, they can ask a homework question and receive an answer from an expert over the Internet. They find out that such personalized help takes time and is not suitable if they need an immediate answer. http://cybersmartcurriculum.org/researchinfo/lessons/4-5/emailing_for_homework_help/
	What About Library Students consider the value of librarians as sources of information in electronic and other forms.	**What's at the Library** Students learn that libraries offer easy-to-use resources for researching a topic for a school report. http://cybersmartcurriculum.org/researchinfo/lessons/4-5/whats_at_the_library/
	Recognizing Commercial Intentions Students learn that many Web sites are intended to sell, advertise, or promote products or services.	**A Place to Advertise** Students consider that some Web sites are designed as advertising environments to entertain visitors while promoting advertisers' brands and products. http://cybersmartcurriculum.org/researchinfo/lessons/4-5/a_place_to_advertise/
Twenty-First Century Challenges	**Communication Inventions** Students learn how the Internet relates to communication inventions of the past.	**Great Communication** Students consider great communications inventions, including the Internet, and assess advantages and disadvantages of each. http://cybersmartcurriculum.org/challenges/lessons/4-5/great_communicators/
	What is Cyberspace? Students conceptualize the geography of cyberspace and explains how it relates to the places they know.	**Cyberspace Country** Students contrast cyberspace with actual and fantasy places, learn that cyberspace is where *real* people connect using computers and *real* experiences take place, and visually express their conception of the geography of cyberspace in the U.S. http://cybersmartcurriculum.org/challenges/lessons/4-5/cyberspace_country/
	How Does the Internet Work? Students learn	**What Is a Network?** Students model a network and learn that the Internet consists of many computer networks that are able to communicate

	about networks and the network of networks- the Internet.	with one another. http://cybersmartcurriculum.org/challenges/lessons/4-5/what_is_a_network/
	Into the Future Students predict how new communications will affect people in the future.	**Imagining the Future** Students consider emerging computer and Internet technologies, and predict how such developments might directly affect the lives of kids in the future. http://cybersmartcurriculum.org/challenges/lessons/4-5/imagining_the_future/

Grades 6-8 CyberSmart Curriculum and Links

Unit	Topic	Lesson Overview and Link
Safety and Security Online	**Private Identity Information** Students experience the excitement and power of the Internet while learning safety and security rules to protect their identities online, not only in terms of personal safety but in context of identity theft.	**Private and Personal Information** Students learn they can converse and share ideas and opinions with others in cyberspace. They adopt a critical thinking process that empowers them to protect themselves and their families as they visit sites requesting private identity information. http://cybersmartcurriculum.org/safetysecurity/lessons/6-8/private_and_personal_information/
	Meeting People Online Students learn that, although they may develop rewarding online relationships, the people they meet in cyberspace must be treated as strangers.	**Savvy Online Talk and Messaging** Students explore the benefits of online talk and messaging and consider scenarios in which they might feel uncomfortable or be asked to give away private identity information. They identify situations in which flirting and sexual talk is risky and discuss safety rules to apply online. http://cybersmartcurriculum.org/safetysecurity/lessons/6-8/savvy_online_talk_and_messaging/

	Security Students learn how to handle e-mail, messaging, texting, password-protected accounts, and computer network security.	**Smart, Safe, and Secure Online** Students consider some security challenges related to e-mail, instant messaging, and free downloads—spam, malware attachments, electronic chain letters, and phishing—discussing ways of handling them safely and responsibly. Then they create cartoons and comics to educate others about cyber security. http://cybersmartcurriculum.org/safetysecurity/lessons/6-8/smart_safe_and_secure_online/ **Strong Passwords** Students learn how to create secure passwords in order to protect their private information and accounts online. http://cybersmartcurriculum.org/safetysecurity/lessons/6-8/strong_passwords/
Safety and Security Online	**Online Privacy** Students learn that commercial Web sites collect information about visitors and how to recognize whether such sites protect privacy.	**Check the Privacy Policy** Students evaluate Web site privacy policies with a checklist based on Federal Trade Commission rules for compliance with the Children's Online Privacy Protection Act. http://cybersmartcurriculum.org/safetysecurity/lessons/6-8/check_the_privacy_policy/ **Privacy- What's the Big Deal?** Students explore the concept of privacy in their everyday lives and as it relates to visiting Web sites. **http://cybersmartcurriculum.org/safetysecurity/lessons/6-8/privacy_whats_the_big_deal/**
Manners, Cyberbullying, and Ethics	**Cyberbullying** Students examine their own and others behavior and learn what constitutes cyberbullying. They also learn how to deal with cyberbullying.	**Cyberbullying: Not a Pretty Picture** Students explore a scenario in which a friendly relationship turns to a bullying one involving cell phones and computers. Then they create a glossary of abbreviations that will give contextual clues to text messages. http://cybersmartcurriculum.org/cyberbullying/lessons/6-8/cyberbullying_not_a_pretty_picture/ **Cyberbullying: Who, Me? Why Should I Care?** Students explore the roles and responsibilities of bystanders to cyberbullying. Then they develop a plan for peer mentoring to prevent cyberbullying situations. http://cybersmartcurriculum.org/cyberbullying/lessons/6-8/cyberbullying_who_me_why_should_i_care/ **Cyberbullying: Crossing the Line** Students learn that when cyberbullying includes threats to safety, they must involve trusted adults. They develop a plan to enable students to report cyberbullying to school authorities anonymously. http://cybersmartcurriculum.org/cyberbullying/lessons/6-8/cyberbullying_crossing_the_line/

		Dealing With Cyberbullying Students reflect on the rewards of cyberspace, consider how to respond to cyberbullying scenarios, and learn how to take action when confronted with online situations that make them uncomfortable. http://cybersmartcurriculum.org/cyberbullying/lessons/6-8/dealing_with_cyberbullying/
Manners, Cyberbullying, and Ethics	**Cyber Citizenship** Students consider the power and responsibilities of citizenship in cyberspace, including adherence to their school's Acceptable Use Policy.	**Power and Responsibility** Students consider the power of the Internet to disseminate positive and negative ideas of individuals, as well as large organizations. They relate the privileges and responsibilities of cyber citizenship to their school's Acceptable Use Policy (AUP). http://cybersmartcurriculum.org/mannersbullyingethics/lessons/6-8/power_and_responsibility/
	Ethics and Property Students explore the concepts of property and learn to use hardware, networks, and intellectual property ethically.	**Considering Copying** Students consider possible ways to copy others' works using the Internet and learn that many forms of copying are illegal or unethical. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/6-8/considering_copying/ **Can You Hack It?** Students learn that computers and electronic files are property and explore the reasons for, consequences, and ethics of teen hacking. http://cybersmartcurriculum.org/mannersbullyingethics/lessons/6-8/can_you_hack_it/
	Netiquette Students learn the dos and don'ts of good manners in cyberspace.	**Good Messaging Manners** Students learn guidelines for good manners in cyberspace, including tips for E-mail, instant messages, chat, and message boards. **http://cybersmartcurriculum.org/mannersbullyingethics/lessons/6-8/good_messaging_manners/**

Research & Information Fluency Research & Information Fluency	**Search Engines and Directories** Students learn that different search sites offer different features and ways of searching.	**Investigating Search Engines and Directories** Students learn how search engines, directories, and meta-search engines work and compare and contrast their features. http://cybersmartcurriculum.org/researchinfo/lessons/6-8/investigating_search_engines_and_directories/
Research & Information Fluency Research & Information Fluency	**The Nuts and Bolts of Searching** Students Learn a variety of strategies for locating information using search engines and directory sites.	**Smart Keyword Searching** When you know the specific information you need, keyword searching is the most effective method of searching on the World Wide Web. Students learn strategies to increase the accuracy of their search. They compare the number and kinds of sites obtained and make inferences about the effectiveness of the strategies. http://cybersmartcurriculum.org/researchinfo/lessons/6-8/smart_keyword_searching/ **Making Search Directories** Students interpret some powerful decision-making tips to increase their searching efficiency and then apply them in school research scenarios. They also learn to look for advanced search strategies offered at most search sites. **http://cybersmartcurriculum.org/researchinfo/lessons/6-8/making_search_decisions/**
	Evaluating Web Sites Students applying given criteria to determine the usefulness and appropriateness of informational Web Sites.	**Identifying High-Quality Sites** Students learn that, because anyone can publish on the Web, they must carefully evaluate the sites they use for research. They review evaluation criteria and use a checklist to "grade" informational sites. http://cybersmartcurriculum.org/researchinfo/lessons/6-8/identifying_high_quality_sites/
	Homework Help Students examine Web sites for homework help and learn how to correctly cite online sources.	**How to Cite a Source** Students learn how to write bibliographic citations for online sources following the style recommended by the Modern Language Association. http://cybersmartcurriculum.org/researchinfo/lessons/6-8/how_to_cite_a_site/

	What About Library Students consider the value of librarians as sources of information in electronic and other forms.	**Online @ the Library** Students learn that there are often advantages to using the Internet from a school or public library and investigate the specific services offered by their own library. http://cybersmartcurriculum.org/researchinfo/lessons/6-8/online_at_the_library/
Research & Information Fluency Research & Information Fluency	**Recognizing Commercial Intentions** Students learn that many Web sites are intended to sell, advertise, or promote products or services.	**Sticky Sites** Students explore why and how commercial Web sites attempt to attract and keep visitors. http://cybersmartcurriculum.org/researchinfo/lessons/6-8/sticky_sites/
Twenty-First Century Challenges	**Communication Inventions** Students learn how the Internet relates to communication inventions of the past.	**Great Moments in Communications** Students assemble a timeline to understand how communications technology has evolved, and relate the invention of the Internet to earlier inventions. http://cybersmartcurriculum.org/challenges/lessons/6-8/great_moments_in_communications/
	What is Cyberspace? Students conceptualize the geography of cyberspace and explains how it relates to the places they know.	**Cyberspace World** Students consider the concept of cyberspace as a *place* and learn that it can be defined as *real* people communicating through computers connected to the Internet. They create a map to visually represent that definition, taking into account the influences of population, language, and geography around the world. http://cybersmartcurriculum.org/challenges/lessons/6-8/cyberspace_world/
	How Does the Internet Work? Students learn about networks and the network of networks- the Internet.	**Information Highways** Students model how information travels on the Internet and discover how the design of the Internet allows it to grow easily and never completely break down. http://cybersmartcurriculum.org/challenges/lessons/6-8/information_highways/
	Into the Future Students predict how new communications	**L.24 Debating Future** Students analyze social issues related to the future use of the Internet, decide if they agree or disagree with one another, and support their views in a debate.

	will affect people in the future.	http://cybersmartcurriculum.org/challenges/lessons/6-8/debating_the_future/

Grades 9-12 CyberSmart Curriculum and Links

Unit	Topic	Lesson Overview and Link
Safety and Security Online	**Private Identity Information** Students experience the excitement and power of the Internet while learning safety and security rules to protect their identities online, not only in terms of personal safety but in context of identity theft.	**Online Identity Theft: Information is Power** Students learn about the methods criminals use to steal identities online. They develop an identity theft prevention tip list and propose ways to communicate their tips to their families. http://cybersmartcurriculum.org/safetysecurity/lessons/9-12/online_identity_theft_information_is_power/
	Meeting People Online Students learn that, although they may develop rewarding online relationships, the people they meet in cyberspace must be treated as strangers.	**Making Good Decisions** Students take a true/false quiz about the risks to teens regarding online sexual victimization by adults. They use an analysis of the results as the basis for a classroom discussion of how they can harness the power of the Internet while avoiding risky behavior that can lead to involvement in criminal sexual activity. http://cybersmartcurriculum.org/safetysecurity/lessons/9-12/making_good_decisions/ **Your Online Image** Students explore the consequences of unintended audiences viewing their social network profiles. They consider four key characteristics of social network sites and how they might affect teens as they try out new identities. Then, students collaborate to write a letter to parents demonstrating their understanding of issues related to unintended online audiences. http://cybersmartcurriculum.org/safetysecurity/lessons/9-

		12/your_online_image/
Safety and Security Online	**Security** Students learn how to handle e-mail, messaging, texting, password-protected accounts, and computer network security. **Security** Students learn how to handle e-mail, messaging, texting, password-protected accounts, and computer network security.	**Managing Passwords** Students take a quiz to determine the strength of their passwords. They learn the reasons for building passwords that are hard to crack and practice creating passwords that follow recommended security rules. They devise a way to communicate what they have learned to their families. http://cybersmartcurriculum.org/safetysecurity/lessons/9-12/managing_passwords/ **Safeguarding Your Stuff, My Stuff, Our Stuff** Students explore real stories of cyber security threats and damage and learn to think responsibly about securing their families' data at home and when using public computers. They think creatively about how to talk with their families about cyber security. http://cybersmartcurriculum.org/safetysecurity/lessons/9-12/safeguarding_your_stuff_my_stuff_our_stuff/
Manners, Cyberbullying, and Ethics	**Cyberbullying** Students examine their own and others behavior and learn what constitutes cyberbullying. They also learn how to deal with cyberbullying.	**Acceptable Social Networking?** Students explore a scenario in which an angry student creates a false online identity in order to seek revenge. They explore ways to resolve the situation and develop a list of tips to help other teens avoid cyberbullying situations. http://cybersmartcurriculum.org/cyberbullying/lessons/9-12/acceptable_social_networking/ **Connected, 24/7** Students explore how bullying behaviors on social networking sites and cell phones can affect teens around the clock. They identify positive actions that bystanders can take to alleviate a particular scenario. Then they write a letter to the editor discussing the positives and negatives of social networking sites, messaging, and cell phone technologies used by teens. http://cybersmartcurriculum.org/cyberbullying/lessons/9-12/connected_247/
	Cyber Citizenship Students consider the power and responsibilities of	**In Development**

	citizenship in cyberspace, including adherence to their school's Acceptable Use Policy.	
	Ethics and Property Students explore the concepts of property and learn to use hardware, networks, and intellectual property ethically.	**In Development**
Manners, Cyberbullying, and Ethics	**Netiquette** Students learn the dos and don'ts of good manners in cyberspace.	**In Development**
Research & Information Fluency Research & Information Fluency	**Search Engines and Directories** Students learn that different search sites offer different features and ways of searching.	**In Development**
	The Nuts and Bolts of Searching Students learn a variety of strategies for locating information using search engines and directory sites.	**In Development**
	Evaluating Web Sites Students applying given criteria to determine the	**Evaluating Online Resources** Students learn to think critically about their choices of Web sites for research by using an evaluation checklist that discusses the key characteristics of trustworthy sites. A sampling of sites on a topic of high interest to students

	usefulness and appropriateness of informational Web Sites.	provides the lesson context. Optional strategies for the use of Web 2.0 tools are included. Extend the lesson to examine the use of Wikipedia. http://cybersmartcurriculum.org/researchinfo/lessons/9-12/evaluating_online_resources/
	Homework Help Students examine Web sites for homework help and learn how to correctly cite online sources.	**In Development**
Research & Information Fluency Research & Information Fluency	**What About Library** Students consider the value of librarians as sources of information in electronic and other forms.	**In Development**
	Recognizing Commercial Intentions Students learn that many Web sites are intended to sell, advertise, or promote products or services.	**In Development**
Twenty-First Century Challenges	**Communication Inventions** Students learn how the Internet relates to communication inventions of the past.	**In Development**
	What is Cyberspace? Students conceptualize the geography of cyberspace and explains how it	**In Development**

	relates to the places they know.	
	How Does the Internet Work? Students learn about networks and the network of networks- the Internet.	**In Development**
	Into the Future Students predict how new communications will affect people in the future.	**In Development**

More Suggested Resources to Teach Internet Safety

- *Be Web Aware* by Media Awareness: http://www. bewebaware.ca/english/default.aspx
- *Get Net Wise* : http://kids.getnetwise.org/safetyguide/
- *Pure Sight Protecting Children Online:* http://www.cyberbullying.org
- *McGRUFF the Crime Dog:* http:www.mcgruff.org
- *Wired Safety: Stop Cyberbullying:* http://www.stopcyberbullying.org
- *Netsmartz:* http://www.netsmartz.org
- *Federal Bureau or Investigation Safe Online Surfing:* http://sos.fbi.gov
- *iKeepSafe:* http://www.ikeepsafe.org
- *Cyber Treehouse:* http://www.cybertreehouse.com
- *Web Wise Kids:* http://webwisekids.org

Appendix 4 Richmond County Proposed 2014 Technology Budget

	2011-2012		**TECHNOLOGY**	**2013-2014**		
			ADMINISTRATION - 68300			
	$59,700.00		1110 ADMINISTRATIVE	$63,240.00		
	$92,960.00		1140 TECHNICAL SUPPORT	$90,584.00		
	$11,680.00		2100 SOCIAL SECURITY	$11,768.00		
	$15,485.00		2210 RETIREMENT & HCC	$17,936.00		
	$14,550.00		2300 HOSPITALIZATION	$17,237.00		
	$0.00		2301 HOSPITALIZATION - RETIREES	$0.00		
	$385.00		2400 GROUP LIFE INSURANCE	$1,831.00		
	$15,065.00		3000 PURCHASED SERVICES	$16,000.00		
	$2,000.00		5500 TRAVEL/CONFERENCE EXPENSES	$3,000.00		
	$1,500.00		6000 INSTRUCTIONAL SUPPLIES	$5,000.00		
	$2,500.00		6040 TECHNOLOGY SOFTWARE	$45,000.00		
	$14,000.00		6050 NON-CAPITALIZED - HARDWARE	$25,000.00		
	$1,000.00		6060 NON-CAPITALIZED - INFRASTRUCTURE	$35,000.00		
	2011-2012		**TECHNOLOGY**	**2013-2014**		
			ADMINISTRATION - 68300			

	$15,000.00		8110 C.O. REPLACEMENT - HARDWARE	$0.00		
	$2,000.00		8120 C.O. REPLACEMENT - INFRASTRUCTURE	$0.00		
	$3,500.00		8210 C.O. ADDITIONS - HARDWARE	$0.00		
	$1,000.00		8220 C.O. ADDITIONS - INFRASTRUCTURE	$0.00		
			CLASSROOM INSTRUCTION - ELEM. & SEC. - 68100			
	$44,605.00		1120 TEACHERS - WAGES	$59,150.00		
	$3,415.00		2100 SOCIAL SECURITY	$4,526.00		
	$5,055.00		2210 RETIREMENT & HCC	$6,898.00		
	$4,850.00		2300 HOSPITALIZATION	$5,746.00		
	$125.00		2400 GROUP LIFE INSURANCE	$704.00		
	$2,000.00		3000 PURCHASED SERVICES	$0.00		
	$3,000.00		5001 TELECOMMUNICATIONS	$62,000.00		
	$1,500.00		5500 TRAVEL	$2,500.00		
	2011-2012		**TECHNOLOGY**	**2013-2014**		
			CLASSROOM INSTRUCTION - ELEM. & SEC. - 68100			
	$41,000.00		6000 INSTRUCTIONAL SUPPLIES	$6,000.00		
	$31,000.00		6040 TECHNOLOGY SOFTWARE	$50,000.00		

	$52,380.00		6050 NON-CAPITALIZED - HARDWARE	$105,000.00		
	$5,000.00		6060 NON-CAPITALIZED - INFRASTRUCTURE	$5,000.00		
	$18,850.00		8110 C.O. REPLACEMENT - HARDWARE	$0.00		
	$1,000.00		8120 C.O. REPLACEMENT - INFRASTRUCTURE	$0.00		
	$7,000.00		8210 C.O. ADDITIONS - HARDWARE	$0.00		
	$1,000.00		8220 C.O. ADDITIONS - INFRASTRUCTURE	$0.00		
			INSTRUCTIONAL SUPPORT - 68200			
	$1,500.00		3000 PURCHASED SERVICES	$0.00		
	$2,000.00		3125 INSERVICE EDUCATION	$0.00		
	$1,000.00		6025 INSTRUCTIONAL SUPPLIES	$0.00		
	2011-2012		**TECHNOLOGY**	**2013-2014**		
			INSTRUCTIONAL SUPPORT - 68200			
	$2,000.00		6040 TECHNOLOGY SOFTWARE	$0.00		
	$6,000.00		8110 C.O. REPLACEMENT - HARDWARE	$0.00		
	$1,200.00		8120 C.O. REPLACEMENT - INFRASTRUCTURE	$0.00		
	$1,000.00		6050 NON-CAPITALIZED - HARDWARE	$0.00		
	$1,000.00		6060 NON-CAPITALIZED - INFRASTRUCTURE	$0.00		

	$3,000.00		8210 C.O. ADDITIONS - HARDWARE	$0.00		
	$1,000.00		8220 C.O. ADDITIONS - INFRASTRUCTURE	$0.00		
	$493,805.00		**TOTAL**	**$ 639,120.00**		

Appendix 5 Richmond County Proposed 2016 Technology Budget

2013-2014		TECHNOLOGY		2016-2017
		ADMINISTRATION - 68300		
$63,240.00		1110 ADMINISTRATIVE		$69,160.00
$90,584.00		1140 TECHNICAL SUPPORT		$122,817.00
$11,768.00		2100 SOCIAL SECURITY		$12,593.00
$17,936.00		2210 RETIREMENT & HCC		$24,133.00
$17,237.00		2300 HOSPITALIZATION		$17,460.00
$0.00		2301 HOSPITALIZATION - RETIREES		$0.00
$1,831.00		2400 GROUP LIFE INSURANCE		$1,942.00
$16,000.00		3000 PURCHASED SERVICES		$25,000.00
$3,000.00		5500 TRAVEL/CONFERENCE EXPENSES		$1,000.00
$5,000.00		6000 INSTRUCTIONAL SUPPLIES		$0.00
$45,000.00		6040 TECHNOLOGY SOFTWARE		$29,000.00
$25,000.00		6050 NON-CAPITALIZED - HARDWARE		$32,000.00
$35,000.00		6060 NON-CAPITALIZED - INFRASTRUCTURE		$35,000.00
$0.00		8110 C.O. REPLACEMENT - HARDWARE		$57,925.00
$0.00		8120 C.O. REPLACEMENT - INFRASTRUCTURE		$0.00
$0.00		8210 C.O. ADDITIONS - HARDWARE		$0.00
$0.00		8220 C.O. ADDITIONS - INFRASTRUCTURE		$0.00

		CLASSROOM INSTRUCTION - ELEM. & SEC. - 68100			
$59,150.00		1120	TEACHERS - WAGES		$6,883.00
$4,526.00		2100	SOCIAL SECURITY		$527.00
$6,898.00		2210	RETIREMENT & HCC		$1,009.00
$5,746.00		2300	HOSPITALIZATION		$582.00
$704.00		2400	GROUP LIFE INSURANCE		$81.00
$0.00		3000	PURCHASED SERVICES		$6,000.00
$62,000.00		5001	TELECOMMUNICATIONS		$63,000.00
$2,500.00		5500	TRAVEL		$500.00
$6,000.00		6000	INSTRUCTIONAL SUPPLIES		$6,000.00
$50,000.00		6040	TECHNOLOGY SOFTWARE		$55,000.00
$105,000.00		6050	NON-CAPITALIZED - HARDWARE		$150,000.00
$5,000.00		6060	NON-CAPITALIZED - INFRASTRUCTURE		$20,000.00
$0.00		8110	C.O. REPLACEMENT - HARDWARE		$0.00
$0.00		8120	C.O. REPLACEMENT - INFRASTRUCTURE		$0.00
$0.00		8210	C.O. ADDITIONS - HARDWARE		$0.00
$0.00		8220	C.O. ADDITIONS - INFRASTRUCTURE		$0.00
$ 639,120.00		**TOTAL**			**$ 737,612.00**